S1425-1

DATA BOOK:

Financing Postsecondary Education

in Delaware

for FY89

Delaware Postsecondary Education Commission

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INTRODUCTION

During the current fiscal year the State of Delaware is providing $111 million to support higher education. State support will likely be greater in the next fiscal year. Whether this level of support is too little, too much, or exactly right is a matter for discussion and continuing assessment.

The State's support of higher education in FY88 constitutes 36% of total higher education expenditures (among the seven colleges in Delaware) of approximately $305 million. Although the State's share of total higher education costs is only 36%, the State's role in shaping and nurturing the higher education establishment is significant.

Each year the Governor and the General Assembly make decisions about higher education in Delaware. These decisions, one at a time, like the cuts of a sculptor's chisel, bring about lasting changes in the structure, composition and character of the education available to Delaware citizens, and lasting changes in the nature of higher education resources available to the State.

The State's decision in 1867 to provide its land-grant funds to Delaware College (University of Delaware) is memorable. The long-term effects of that decision are obvious. The State's decision not to fund the Delaware State Normal University in 1866, is forgotten. The long-term effects of that decision, however, are also obvious. The right of eminent domain, granted to Delaware College (University of Delaware) in 1913, in exchange for the College deeding all of its property to the State, was a decision with long-lasting and significant effects. The decision to fund a "Delaware Research Partnership" at the University of Delaware in 1985, may, at some time, seem equally noteworthy.

Establishing Delaware State College as the States' second land-grant college under the Morrill Act of 1890, has had important and far-reaching impact on Delaware higher education. Decisions made in 1981 to fund graduate education at Delaware State College stand as a landmark which may, at some time, seem equally as important.

The placement of community colleges, funding new buildings or renovations, professors, new departments or degrees, are all chips of a sculptor's chisel - all increments having lasting effects on the institutions, and, thus, on the State.

It is in the context of the importance of each decision that the Postsecondary Education Commission presents its "Data Book" at this point in the budget cycle as background and reference for those who have the responsibility for setting priorities for the funding of higher education. It is the Commission's hope that the "Data Book" provides a basic step in the direction of clearer understanding of the status and the needs of higher education in the State of Delaware.

Data standardized over the years are presented to highlight trends in financing, enrollment and program completion. Comparisons with national data, with regional institutions, and among in-state institutions are presented to provide perspective and benchmarks.

Much of the content herein is presented, therefore, to provide the broad view of postsecondary education in Delaware, a view that will allow the reader to note the long-term effects of some decisions of the past. In other areas, suggestions about possible long-term effects of upcoming decision points are offered.

The Commission is prepared at any time to make specific data available and provide assistance to those involved in the decision processes which affect postsecondary education in Delaware.

FINANCIAL SUPPORT OF POSTSECONDARY EDUCATION IN DELAWARE: SOME COMPARATIVE MEASURES

The Commission attempts here to answer questions concerning Delaware's efforts toward funding higher education as they compare to those of other states. Questions about the adequacy of state appropriations are continually raised in Delaware and in all other states. Answers to such questions are drawn using different data and different assumptions, and generally result in a variety of conclusions.

Major Conclusions On Comparisons

The Commission's conclusions are listed below with data and explanations following.

1. Delaware's system of public higher education, because of the number and mix of students at types of institutions, has a theoretical cost requirement* per student that is ranked third in the nation, 41% above average.

2. Total resources per student, including tuition and state appropriations, available to Delaware's public institutions rank fifth in the nation, 44% above average.

3. In considering the financial resources against the theoretical financial requirements of state systems Delaware ranks 18th, 12% above average.

4. The State of Delaware ranks eighth in the nation in the percentage of tax revenue appropriated to higher education, 32% above average.

5. On an appropriation per student basis, without considering types of students and other resources Delaware ranks 14th, 11% above average.

6. In terms of nine-year constant dollar increases in appropriations for higher education Delaware ranks fourth in the nation.

*Theoretical Cost Requirement or "System Load" considers the number of postsecondary students per 1,000 population and the types (e.g., university, two year college) of institutions attended.

Until 1987 the Commission had displayed data compiled by the M. M. Chambers organization for purposes of interstate comparisons in financing public higher education. The Chambers measures have proved to be unsatisfactory as indicators of the interaction of unique characteristics of states' higher education systems. Though no set of comparisons can be perfect in comparing fifty different systems of higher education, the annual study conducted by Kent Halstead stands out as the most complete and comprehensive national comparison. Halstead's data, segments of which are presented below, published as State Profiles: Financing Public Higher Education 1978-87, lags one year behind the current fiscal year, but barring dramatic annual changes should bear a close resemblance to the current state of affairs.

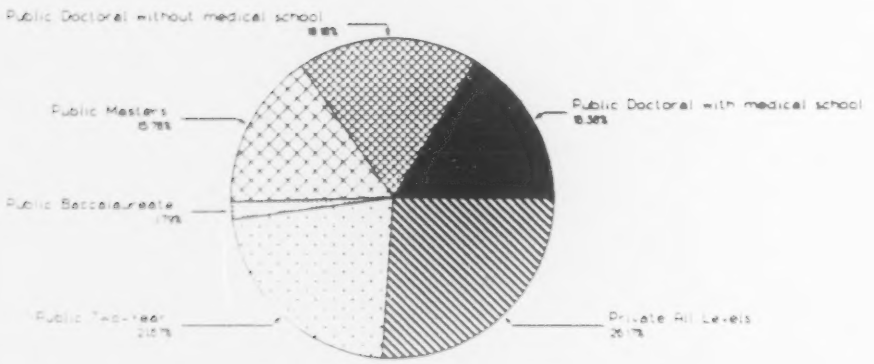
A valuable aspect of Halstead's data is the consideration of system load. This factor considers the number of students enrolled in public colleges per 1,000 state population. Delaware is higher than average on this measure with an index of 116 (100 being average), which places Delaware 12th highest in the nation. The other factor contributing to system load is the type or level of institutions where students are concentrated. A state like Delaware, where students are heavily concentrated at the university level, has a much more expensive system than one in which students are concentrated at two- and four-year colleges. Delaware's institutional concentrations and number of students per capita, place it third highest among all states on the system load factor with an index of 138 (Table 2). Simply put, it is a very expensive system to support.

Figure 1 displays a comparison of the distribution of students in various postsecondary sectors in Delaware against the national average. The data compiled by the U. S. Center for Education Statistics, are for 1985.

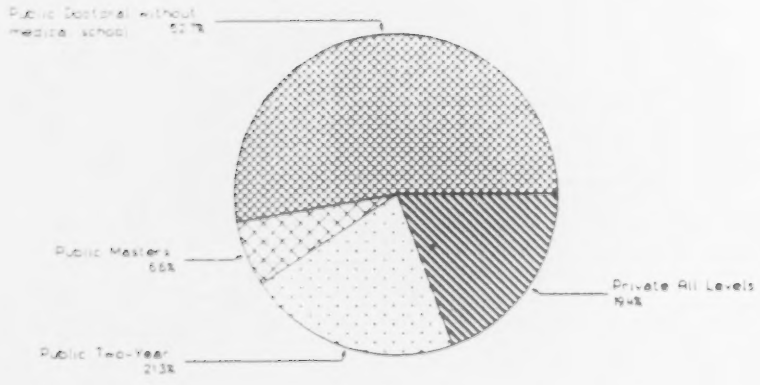
Figure 1

Distribution of College Students Among Segments in Delaware And National Average

U. S. Average



Delaware



Discussion

Several measures are used in Halstead's study to compare states on their support for public higher education. Four relevant state rankings are included as Table 1. The first ranking, **Tax Capacity**, is based on calculations of the potential of state and local governments to obtain revenues for public purposes through various kinds of taxes. The states' tax capacities are defined as that amount of

revenue they could collect if all 50 state-local systems applied identical tax rates (national averages) to their respective tax bases. Delaware ranks fourth on this measure with an index of 125.

The second rating, Tax Effort, compares tax revenue collected as a percentage of tax capacity. On this rating Delaware ranks 47th collecting only 78.5% of the tax dollars defined as its potential tax capacity in this study.

The third rating places Delaware 17th in tax revenue per capita with an index of 98.

The fourth rating compares appropriations for higher education as a percentage of the states' tax revenues. On this measure Delaware ranks eighth (index 132).

Delaware's appropriations per public college student rank 14th in the nation, 11% higher than the average state (Table 2). Relative to the system's financial load - i.e., finance theoretically required to support our particular size and mix of students - state appropriations fall somewhat short, ranking 20th, 6% below average. This situation, however, is compensated for by out-of-state tuition collection in the state. Delaware and four other states are footnoted in the Halstead study, as follows: "The payment of high non-resident tuition by a large proportion of out-of-state students, substantially increases tuition revenues and correspondingly reduced appropriation requirements."

When Delaware's higher than average tuition receipts are factored in as the last column in Table 2, Delaware ranks fifth in total support, 44% above average.

It should be obvious that the resident/non-resident factor (discussed in detail on pp.65-67) plays an important role in Delaware higher education finance. The out-of-state student swells our public college population beyond what would be expected from Delaware's population base. This results in both greater costs and greater tuition income.

Table 1

Four State Ranking Tables From Halstead's State Profiles

Tax Capacity
1985 est.

	Dollars per capita	Index
1. ALASKA	$3,379	240
2. WYOMING	$2,533	180
3. NEVADA	$2,028	144
4. DELAWARE	$1,760	125
5. CONNECTICUT	$1,748	124
6. DIST COL	$1,703	121
7. COLORADO	$1,690	120
8. CALIFORNIA	$1,665	118
9. HAWAII	$1,661	118
10. NEW JERSEY	$1,619	115
11. TEXAS •	$1,612	114
12. MASSACHUSETTS	$1,591	113
13. OKLAHOMA	$1,563	111
14. NEW HAMPSHIRE	$1,563	111
15. MARYLAND	$1,521	108
16. FLORIDA	$1,501	107
17. NORTH DAKOTA	$1,436	102
18. NEW YORK	$1,428	101
19. MINNESOTA	$1,422	101
20. NEW MEXICO	$1,422	101
21. ARIZONA	$1,409	100
22. LOUISIANA	$1,394	99
23. WASHINGTON	$1,380	98
24. KANSAS	$1,379	98
25. ILLINOIS	$1,373	98
26. VIRGINIA	$1,352	96
27. VERMONT	$1,351	96
28. MICHIGAN	$1,309	93
29. OREGON	$1,295	92
30. NEBRASKA	$1,267	90
31. WISCONSIN	$1,267	90
32. OHIO	$1,267	90
33. GEORGIA •	$1,267	90
34. MONTANA	$1,267	90
35. NORTH CAROLINA	$1,239	88
36. MISSOURI	$1,239	88
37. PENNSYLVANIA	$1,239	88
38. MAINE	$1,238	88
39. INDIANA	$1,225	87
40. RHODE ISLAND	$1,211	86
41. IOWA	$1,197	85
42. TENNESSEE	$1,140	81
43. SOUTH DAKOTA	$1,140	81
44. UTAH	$1,126	80
45. SOUTH CAROLINA	$1,098	78
46. KENTUCKY	$1,070	76
47. IDAHO	$1,056	75
48. WEST VIRGINIA	$1,056	75
49. ARKANSAS	$1,028	73
50. ALABAMA	$1,028	73
51. MISSISSIPPI	$985	70
UNITED STATES	$1,408	100

Tax Effort
1985 est.

	Percent	Index
1. NEW YORK	155.8%	158
2. DIST COL	139.5%	139
3. ALASKA	131.5%	132
4. WISCONSIN	125.9%	128
5. MICHIGAN	121.7%	122
6. RHODE ISLAND	121.3%	121
7. MINNESOTA	119.4%	119
8. IOWA	110.5%	110
9. UTAH	110.1%	110
10. MONTANA	108.1%	108
11. NEW JERSEY	107.0%	107
12. WEST VIRGINIA	106.1%	106
13. MASSACHUSETTS	105.7%	106
14. MAINE	105.3%	105
15. ILLINOIS	105.2%	105
16. OREGON	104.3%	104
17. PENNSYLVANIA	103.3%	103
18. OHIO	102.9%	103
19. WYOMING	102.2%	102
20. CONNECTICUT	101.2%	101
21. HAWAII	99.1%	99
22. WASHINGTON	97.8%	98
23. MARYLAND	97.5%	97
24. KANSAS	96.5%	96
25. NEBRASKA	95.9%	96
26. INDIANA	95.4%	95
27. VERMONT	95.4%	95
28. ARIZONA	95.4%	95
29. CALIFORNIA	94.9%	95
30. SOUTH CAROLINA	94.5%	94
31. IDAHO	94.3%	94
32. ARKANSAS	92.3%	92
33. MISSISSIPPI	92.0%	92
34. NORTH DAKOTA	91.5%	91
35. ALABAMA	90.7%	91
36. NORTH CAROLINA	90.5%	90
37. LOUISIANA	90.4%	90
38. KENTUCKY	90.0%	90
39. GEORGIA •	89.6%	90
40. VIRGINIA	88.2%	88
41. SOUTH DAKOTA	88.0%	88
42. MISSOURI	86.2%	86
43. NEW MEXICO	84.3%	84
44. TENNESSEE	83.9%	84
45. COLORADO	83.1%	83
46. OKLAHOMA	79.2%	79
47. DELAWARE	78.5%	79
48. FLORIDA	74.0%	74
49. TEXAS •	73.8%	74
50. NEW HAMPSHIRE	66.0%	66
51. NEVADA	65.3%	65
UNITED STATES	100.0%	100

Tax Revenue
1985 est.
(#4 x #5)

	Dollars per capita	Index
1. ALASKA	$4,444	318
2. WYOMING	$2,588	184
3. DIST COL	$2,376	169
4. NEW YORK	$2,222	158
5. CONNECTICUT	$1,788	125
6. NEW JERSEY	$1,733	123
7. MINNESOTA	$1,698	121
8. MASSACHUSETTS	$1,682	119
9. HAWAII	$1,646	117
10. WISCONSIN	$1,595	113
11. MICHIGAN	$1,593	113
12. CALIFORNIA	$1,570	113
13. MARYLAND	$1,482	105
14. RHODE ISLAND	$1,468	104
15. ILLINOIS	$1,445	103
16. COLORADO	$1,404	100
17. DELAWARE	$1,383	98
18. MONTANA	$1,370	97
19. OREGON	$1,351	96
20. WASHINGTON	$1,350	96
21. ARIZONA	$1,344	95
22. KANSAS	$1,331	95
23. NEVADA	$1,323	94
24. IOWA	$1,322	94
25. NORTH DAKOTA	$1,314	93
26. OHIO	$1,304	93
27. MAINE	$1,304	93
28. VERMONT	$1,290	92
29. PENNSYLVANIA	$1,280	91
30. LOUISIANA	$1,259	89
31. UTAH	$1,240	88
32. OKLAHOMA	$1,237	88
33. NEBRASKA	$1,215	86
34. NEW MEXICO	$1,199	85
35. VIRGINIA	$1,193	85
36. TEXAS •	$1,190	85
37. INDIANA	$1,169	83
38. GEORGIA •	$1,135	81
39. NORTH CAROLINA	$1,121	80
40. WEST VIRGINIA	$1,120	80
41. FLORIDA	$1,111	79
42. MISSOURI	$1,069	76
43. SOUTH CAROLINA	$1,037	74
44. NEW HAMPSHIRE	$1,031	73
45. SOUTH DAKOTA	$1,003	71
46. IDAHO	$996	71
47. KENTUCKY	$963	68
48. TENNESSEE	$957	68
49. ARKANSAS	$949	67
50. ALABAMA	$932	66
51. MISSISSIPPI	$907	64
UNITED STATES	$1,408	100

Allocation to Public
Higher Education
1986-87

	Education (total) approp as a percent of tax revenue		Index
1. NORTH CAROLINA	13.1%	(16.8)	161
2. HAWAII	12.9%	(15.0)	158
3. IDAHO	12.3%	(13.8)	151
4. NEW MEXICO	11.4%	(13.6)	141
5. ALABAMA	11.2%	(14.8)	137
6. TENNESSEE	11.1%	(12.5)	136
7. CALIFORNIA	10.9%	(12.1)	133
8. DELAWARE	10.7%	(11.2)	131
9. NORTH DAKOTA	10.6%	(14.0)	130
10. UTAH	10.5%	(12.0)	130
11. SOUTH CAROLINA	10.5%	(14.4)	129
12. ARIZONA	10.1%	(12.3)	124
13. VIRGINIA	9.9%	(12.4)	122
14. MISSISSIPPI	9.0%	(13.6)	110
15. KANSAS	9.2%	(11.7)	113
16. KENTUCKY	9.1%	(12.8)	113
17. OREGON	9.1%	(11.4)	111
18. WASHINGTON	9.0%	(10.1)	110
19. WISCONSIN	8.9%	(10.1)	110
20. IOWA	8.9%	(10.5)	109
21. WYOMING	8.8%	(9.8)	108
22. ARKANSAS	8.7%	(11.8)	107
23. MINNESOTA	8.7%	(10.2)	107
24. INDIANA	8.5%	(10.8)	105
25. GEORGIA •	8.2%	(10.8)	101
26. TEXAS •	8.1%	(11.4)	100
27. MISSOURI	8.1%	(9.2)	100
28. MICHIGAN	8.1%	(9.2)	99
29. MONTANA	7.9%	(9.2)	97
30. MAINE	7.8%	(8.2)	95
31. MARYLAND	7.7%	(9.8)	94
32. NEBRASKA	7.7%	(12.4)	94
33. RHODE ISLAND	7.5%	(7.7)	93
34. ILLINOIS	7.5%	(8.9)	92
35. OKLAHOMA	7.3%	(9.7)	89
36. NEVADA	7.1%	(8.3)	88
37. OHIO	7.1%	(8.5)	87
38. WEST VIRGINIA	7.1%	(9.9)	87
39. COLORADO	6.7%	(8.0)	83
40. FLORIDA	6.6%	(8.6)	82
41. SOUTH DAKOTA	6.5%	(8.7)	80
42. PENNSYLVANIA	6.3%	(6.7)	78
43. NEW YORK	6.3%	(7.2)	77
44. LOUISIANA	6.2%	(8.8)	76
45. ALASKA	6.0%	(8.2)	73
46. NEW JERSEY	5.8%	(7.4)	71
47. MASSACHUSETTS	5.5%	(5.9)	68
48. CONNECTICUT	5.4%	(6.5)	66
49. NEW HAMPSHIRE	5.1%	(5.4)	63
50. DIST COL	4.8%	(4.6)	58
51. VERMONT	4.2%	(5.8)	52
UNITED STATES	8.1%	(9.8)	100

Table 2

Four State Ranking Tables From Halstead's State Profiles

SYSTEM LOAD
System Financial Requirements
1986-87
(ENROL x #3)

		Pub students load adj per 1,000 pop	Index
1.	NEBRASKA	48.0	162
2.	NORTH DAKOTA	44.3	150
3.	DELAWARE	40.9	138
4.	KANSAS	40.8	137
5.	WISCONSIN	40.3	136
6.	NEW MEXICO	39.5	134
7.	ARIZONA	38.8	131
8.	MINNESOTA	38.6	131
9.	UTAH	38.2	129
10.	COLORADO	37.8	128
11.	NORTH CAROLINA	37.5	127
12.	OKLAHOMA	37.2	126
13.	IOWA	36.6	124
14.	MICHIGAN	35.7	121
15.	ALABAMA	35.3	119
16.	WYOMING	35.3	119
17.	OREGON	34.7	117
18.	WASHINGTON	33.4	113
19.	VIRGINIA	33.3	112
20.	CALIFORNIA	33.1	112
21.	IDAHO	33.0	112
22.	MONTANA	32.6	110
23.	MARYLAND	32.2	109
24.	TEXAS •	31.8	108
25.	VERMONT	31.5	106
26.	MISSISSIPPI	31.4	106
27.	INDIANA	31.0	105
28.	RHODE ISLAND	30.6	103
29.	OHIO	30.4	103
30.	WEST VIRGINIA	29.4	100
31.	ILLINOIS	29.2	99
32.	HAWAII	29.1	98
33.	LOUISIANA	28.1	95
34.	ALASKA	26.4	89
35.	KENTUCKY	26.4	89
36.	SOUTH DAKOTA	25.9	88
37.	MISSOURI	25.8	87
38.	ARKANSAS	25.5	86
39.	SOUTH CAROLINA	25.3	86
40.	TENNESSEE	24.5	83
41.	NEW HAMPSHIRE	24.0	81
42.	FLORIDA	22.5	76
43.	GEORGIA •	22.4	76
44.	NEW YORK	22.1	75
45.	PENNSYLVANIA	21.8	74
46.	MAINE	21.8	74
47.	MASSACHUSETTS	21.2	72
48.	NEVADA	21.1	71
49.	CONNECTICUT	18.9	64
50.	NEW JERSEY	18.6	63
51.	DIST COL	12.6	43
	UNITED STATES	29.6	100

Education Appropriations
per Student 1986-87
(TAX x #8/ENROLL)

		Dollars per student	Index	Relative to system financial load Index	(Rank)	9-year constant dollar change
1.	ALASKA	$9,743	252	259	(1)	-8.6%
2.	DIST COL	$8,719	225	223	(2)	8.4%
3.	HAWAII	$7,876	203	188	(3)	31.2%
4.	WYOMING	$6,826	176	165	(4)	22.0%
5.	NEW YORK	$5,852	151	163	(5)	22.2%
6.	NEW JERSEY	$5,163	133	137	(6)	24.5%
7.	CONNECTICUT	$5,158	133	131	(8)	5.4%
8.	CALIFORNIA	$4,667	121	134	(7)	3.1%
9.	SOUTH CAROLINA	$4,509	116	110	(13)	1.2%
10.	MAINE	$4,497 □	116	120	(9)	50.3%
11.	TENNESSEE	$4,453	115	113	(12)	25.5%
12.	GEORGIA •	$4,387	113	108	(14)	28.8%
13.	MASSACHUSETTS	$4,315	111	114	(11)	-15.3%
14.	DELAWARE	$4,314 □	111	94	(20)	27.9%
15.	NEW MEXICO	$4,129	107	90	(28)	3.6%
16.	NEVADA	$4,122	106	116	(10)	-2.0%
17.	IDAHO	$3,974	103	96	(18)	-16.7%
18.	RHODE ISLAND	$3,893	101	92	(25)	-8.2%
19.	UTAH	$3,867	100	89	(30)	-9.2%
20.	MINNESOTA	$3,854	100	99	(16)	-13.2%
21.	NORTH CAROLINA	$3,841	99	101	(15)	23.3%
22.	PENNSYLVANIA	$3,825	98	96	(19)	-10.2%
23.	VIRGINIA	$3,672	95	93	(22)	23.8%
24.	ARIZONA	$3,639	94	90	(29)	12.1%
25.	MICHIGAN	$3,631	94	93	(23)	-2.4%
26.	KENTUCKY	$3,611	93	86	(32)	-14.4%
27.	WISCONSIN	$3,609	93	92	(24)	-15.8%
28.	INDIANA	$3,601	93	85	(35)	-6.0%
29.	ILLINOIS	$3,567	92	96	(17)	-0.5%
30.	IOWA	$3,561	92	83	(38)	-14.2%
31.	WASHINGTON	$3,550	92	94	(21)	-15.4%
32.	OREGON	$3,531	91	90	(27)	-0.8%
33.	MARYLAND	$3,495	90	91	(26)	-0.6%
34.	ARKANSAS	$3,438	89	85	(36)	0.0%
35.	MISSOURI	$3,359	87	87	(31)	-13.2%
36.	MONTANA	$3,323	86	86	(33)	-10.7%
37.	KANSAS	$3,253	84	78	(41)	-8.2%
38.	OHIO	$3,194	83	79	(39)	5.6%
39.	FLORIDA	$3,147	81	85	(34)	2.1%
40.	NORTH DAKOTA	$3,145	81	83	(37)	-13.7%
41.	TEXAS •	$3,031	78	78	(40)	-0.9%
42.	ALABAMA	$3,005	78	76	(42)	-0.3%
43.	LOUISIANA	$2,956	76	72	(44)	-9.4%
44.	WEST VIRGINIA	$2,926	76	69	(45)	-5.0%
45.	MISSISSIPPI	$2,684	69	72	(43)	-11.9%
46.	COLORADO	$2,673 □	69	65	(47)	2.2%
47.	SOUTH DAKOTA	$2,601	67	66	(46)	-24.8%
48.	OKLAHOMA	$2,586	67	62	(48)	6.6%
49.	NEW HAMPSHIRE	$2,464 □	64	58	(49)	-2.9%
50.	NEBRASKA	$2,134	55	51	(50)	-40.8%
51.	VERMONT	$2,063 □	53	44	(51)	-4.6%
	UNITED STATES	$3,871	100	100		1.2%

TUITION
Estimated Net Tuition per Student
APP x #7/(1-#7)
1986-87

		Dollars per student	Index
1.	VERMONT	$4,622 □	397
2.	NEW HAMPSHIRE	$3,170 □	273
3.	DELAWARE	$2,934 □	251
4.	PENNSYLVANIA	$2,371	204
5.	MICHIGAN	$1,880	162
6.	COLORADO	$1,826 □	157
7.	INDIANA	$1,757	151
8.	OHIO	$1,725	148
9.	NEW JERSEY	$1,677	144
10.	RHODE ISLAND	$1,598	137
11.	IOWA	$1,574	135
12.	WISCONSIN	$1,558	134
13.	SOUTH CAROLINA	$1,541	132
14.	MAINE	$1,521 □	131
15.	VIRGINIA	$1,483	127
16.	MARYLAND	$1,480	126
17.	LOUISIANA	$1,403	121
18.	TENNESSEE	$1,378	118
19.	CONNECTICUT	$1,367	117
20.	MISSOURI	$1,358	117
21.	MISSISSIPPI	$1,314	113
22.	GEORGIA •	$1,289	111
23.	ALASKA	$1,255	108
24.	NORTH DAKOTA	$1,235	106
25.	OREGON	$1,211	104
26.	KENTUCKY	$1,209	104
27.	SOUTH DAKOTA	$1,163	100
28.	MINNESOTA	$1,148	99
29.	WEST VIRGINIA	$1,143	98
30.	KANSAS	$1,115	96
31.	NEVADA	$1,080	93
32.	UTAH	$1,076	93
33.	ARKANSAS	$1,051	90
34.	NEW YORK	$1,048	90
35.	ALABAMA	$1,027	88
36.	WASHINGTON	$1,021	88
37.	MASSACHUSETTS	$997	86
38.	ARIZONA	$929	80
39.	MONTANA	$928	80
40.	NEBRASKA	$900	77
41.	ILLINOIS	$846	73
42.	TEXAS •	$821	71
43.	DIST COL	$811	70
44.	WYOMING	$794	68
45.	FLORIDA	$779	67
46.	NEW MEXICO	$724	62
47.	OKLAHOMA	$640	55
48.	HAWAII	$636	55
49.	NORTH CAROLINA	$614	53
50.	IDAHO	$611	52
51.	CALIFORNIA	$497	43
	UNITED STATES	$1,163	100

Education Appropriations & Est.
Tuition per Student
APP + TUITION
1986-1987

		Dollars per student	Index
1.	ALASKA	$10,998	218
2.	DIST COL	$9,530	189
3.	HAWAII	$8,512	168
4.	WYOMING	$7,620	151
5.	DELAWARE	$7,238	144
6.	NEW YORK	$6,900	137
7.	NEW JERSEY	$6,840	136
8.	VERMONT	$6,685	133
9.	CONNECTICUT	$6,524	130
10.	PENNSYLVANIA	$6,190	123
11.	SOUTH CAROLINA	$6,050	120
12.	MAINE	$6,018	120
13.	TENNESSEE	$5,829	116
14.	GEORGIA •	$5,675	113
15.	NEW HAMPSHIRE	$5,635	112
16.	MICHIGAN	$5,511	109
17.	RHODE ISLAND	$5,491	109
18.	INDIANA	$5,358	106
19.	MASSACHUSETTS	$5,312	106
20.	NEVADA	$5,203	103
21.	WISCONSIN	$5,167	103
22.	CALIFORNIA	$5,164	103
23.	VIRGINIA	$5,155	102
24.	IOWA	$5,135	102
25.	MINNESOTA	$5,002	99
26.	MARYLAND	$4,955	98
27.	UTAH	$4,944	98
28.	OHIO	$4,919	98
29.	NEW MEXICO	$4,853	96
30.	KENTUCKY	$4,820	96
31.	OREGON	$4,742	94
32.	MISSOURI	$4,714	94
33.	IDAHO	$4,585	91
34.	WASHINGTON	$4,571	91
35.	ARIZONA	$4,568	91
36.	COLORADO	$4,499	89
37.	ARKANSAS	$4,489	89
38.	NORTH CAROLINA	$4,455	88
39.	ILLINOIS	$4,413	88
40.	NORTH DAKOTA	$4,380	87
41.	KANSAS	$4,368	87
42.	LOUISIANA	$4,359	87
43.	MONTANA	$4,251	84
44.	WEST VIRGINIA	$4,069	81
45.	ALABAMA	$4,031	80
46.	MISSISSIPPI	$3,998	79
47.	FLORIDA	$3,926	78
48.	TEXAS •	$3,852	77
49.	SOUTH DAKOTA	$3,764	75
50.	OKLAHOMA	$3,227	64
51.	NEBRASKA	$3,034	60
	UNITED STATES	$5,035	100

All of the data referenced above are aggregated at the state level. The conclusion must be drawn that Delaware public higher education in the aggregate is adequately supported. The distribution of this support among the three levels - community college, four-year and university levels can be compared to other states and national averages, using data published by The Center For Eduction Statistics in State Higher Education Profiles: 1985 (latest available data).

For comparison purposes, the national averages of revenue per student from six categories (including state appropriations) are included in Tables 3-5 within three state groupings. The first group of states includes those which enroll a large percentage of out-of-state students. The second grouping consists of neighboring states. The third group is made up of other small states.

Three separate tables are presented to compare Delaware's three public higher education institutions: Table 3 UD (doctoral without medical school), Table 4 DSC (Master's level), and Table 5 DTCC (two-year).

The data in Tables 3, 4, and 5, are self-explanatory, and the conclusions drawn will depend on the reader's perception of how the State of Delaware should fund higher education. Whatever the conclusion, it will not be consistent with conclusions drawn from another statistic which lists Delaware 49th among the states in terms of "state appropriations as a percent of total education and general revenues of four-year colleges". Delaware's apparent poor performance on this measure is affected by the overall revenue swell generated by a high percentage of out-of-state tuition payments (for doctoral and master's program institutions), a generally high regional tuition market, and a high level of endowment revenue.

Delaware's per student contribution, however, is still lower than the national average for doctoral level institutions, but in Delaware's situation, where over half of the students in the "per-student" calculation are not state residents, the level of per-student funding may be appropriate. The appropriateness can be concluded from the previously cited Halstead data which show that the combination of state appropriations and tuition provides Delaware's public institutions with the third highest level of support in the nation.

Table 3

Revenues per FTE Student 1984-85

Doctoral Institution Without Medical	Tuition & Fees per Student	Federal Appropriation per Student	State and Local Appropriation per Student	Fed. Gov't Grants Contracts per Student	Income from Private Sources	Sales & Services Of Auxiliary Enterprises per student	Total All Sources per student
Delaware	$3,475	$174	$3,307	$812	$1,598	$1,908	$11,274
Vermont*	5,240	336	2,387	2,505	1,595	2,029	14,092
Maine	1,760	270	3,217	1,171	398	1,610	8,426
Colorado	2,622	0	2,410	1,462	475	1,425	8,394
Pennsylvania	2,997	376	3,543	1,083	896	2,328	11,223
New Jersey	2,243	121	5,697	676	418	1,369	10,524
New York	1,758	-	8,131	1,207	572	737	12,405
Maryland	2,017	4	4,591	1,445	220	1,315	9,592
Virginia	1,960	-	3,202	190	201	1,452	7,005
New Hampshire	3,499	5	2,191	1,660	438	1,538	9,331
Wyoming	1,082	1,172	7,631	1,034	934	2,035	13,888
Nevada	1,209	7	3,339	508	472	718	6,253
South Dakota	1,494	862	3,305	402	125	965	7,153
North Dakota	1,406	532	4,948	569	265	1,388	9,108
US Avg. Public Doctoral Without Medical School	$1,613	$75	$4,380	$813	$409	$1,391	$8,681
US Avg. Private Doctoral Without Medical School	$5,877	$70	$93	$1,125	$2,261	$1,658	$11,084

*With Medical School

Source of Data: State Higher Education Profiles, 1985. US Office of Educational Research and Improvement, US Department of Education.

Table 4

Revenues per FTE Student 1984-85

Master's Level Institutions	Tuition & Fees per Student	Federal Appropriation per Student	State and Local Appropriation per Student	Fed. Gov't Grants Contracts per Student	Income from Private Sources	Sales & Services of Auxiliary Enterprises per Student	Total All Sources per Student
Delaware	$1,218	$5	$6,858	$990	$110	$1,091	$10,272
Vermont	2,708	0	1,779	728	58	1,680	6,953
Maine	N/A	---	---	---	---	---	---
Colorado	1,526	570	1,951	404	106	866	5,423
Pennsylvania	1,890	4	3,527	133	21	880	6,455
New Jersey	1,311	6	3,021	142	29	905	5,414
New York	1,579	6	4,959	263	172	596	7,575
Maryland	2,769	0	3,043	321	68	1,245	7,446
Virginia	1,378	1	2,935	253	16	2,213	6,796
New Hampshire	2,446	0	1,479	285	104	1,587	5,901
Wyoming	N/A	---	---	---	---	---	---
Nevada	N/A	---	---	---	---	---	---
South Dakota	1,528	0	2,222	463	131	991	5,335
North Dakota	960	0	2,347	261	9	812	4,416
US Avg. Public Master's Level	$1,301	$12	$3,732	$255	$89	$957	$6,346
US Avg. Private Master's Level	$5,265	$10	$76	$335	$1,322	$1,526	$8,534

Source of Data: State Higher Education Profiles, 1985. US Office of Educational Research and Improvement, US Department of Education.

Table 5

Revenues per FTE Student 1984-85

Two-Year Colleges	Tuition & Fees per Student	Federal Appropriation per Student	State and Local Appropriation per Student	Fed. Gov't Grants Contracts per Student	Income from Private Sources	Sales & Services of Auxiliary Enterprises per Student	Total All Sources per Student
Delaware	$627*	0	$3,140	$425	0	$284**	$4,476
Vermont	1,955	0	1,824	340	21	1,150	5,290
Maine	744	403	4,207	319	1	299	5,973
Colorado	1,062	1	2,777	165	25	612	4,642
Pennsylvania	1,553	2	1,918	193	12	334	4,012
New Jersey	1,207	0	2,321	103	22	231	3,884
New York	1,347	4	2,947	187	43	186	4,714
Maryland	1,125	3	2,938	207	40	242	4,555
Virginia	809	0	2,481	229	23	73	3,615
New Hampshire	1,482	9	2,476	84	0	104	4,155
Wyoming	507	0	6,001	137	96	830	7,571
Nevada	591	0	1,969	67	18	25	2,670
South Dakota	N/A	---	---	---	---	---	---
North Dakota	1,080	204	2,764	189	76	920	5,233
US Avg. Public Two-Year	$748	$24	$2,776	$181	$29	$284	$4,042
US Avg. Private Two-year	$3,306	$37	$40	$287	$909	$1,084	$5,663

*Incorrectly reported as $372. Commission changed figure to $627 to equal 1984-85 tuition charges.
**None reported. Commission changed figure to $284 which is the national average.

Source of Data: State Higher Education Profiles, 1985. US Office of Educational Research and Improvement, US Department of Education.

COMPARATIVE SUPPORT OF THE THREE PUBLIC COLLEGES
FISCAL YEAR 1987-88 APPROPRIATIONS

Overall State appropriations for the three public institutions increased 3.9 percent from FY 1987 to FY 1988.

The percentage increase for each college is shown below.

	FY87 Approp.	FY88 Approp.	% Change
UD	$63,143.6	$65,744.3	+4.12
DSC	16,432.4	16,754.5	+1.96
DTCC	24,788.9	25,981.5	+4.81

If debt service is excluded, thus leaving appropriations for operating budgets only, the resulting increase is somewhat different, as shown below.

	Operating FY87 Budget	Operating FY88 Budget	% Change
UD	$56,973.7	$59,489.2	+4.42
DSC	14,564.1	14,977.1	+2.84
DTCC	21,472.2	22,285.3	+3.79

State appropriated debt service payments for the three public institutions increased 3.3% from FY87 to FY88. The percentage increase for each college is shown below.

	FY87 Appropriated Debt Service	FY88 Appropriated Debt Service	% Change
UD	$6,169.9	$6,255.1	+1.38
DSC	1,868.3	1,777.4	-4.86
DTCC	3,316.5	3,696.2	+11.45

Table 6

Net State Support Per FTE For The Three Public Colleges

FY79 - FY88

	FY79	FY80	FY81	FY82	FY83	FY84	FY85	FY86	FY87	FY88
U of D										
Current Expense	1,870	1,966	2,469	2,795	2,968	3,045	3,278	3,565	3,715	3,819
Debt Service	322	335	323	316	354	395	391	393	420	402
TOTAL	2,192	2,301	2,792	3,111	3,322	3,440	3,669	3,958	4,135	4,221
DSC										
Current Expense	3,550	4,126	4,970	5,528	6,154	6,526	6,949	7,424	8,195	8,091
Debt Service	725	703	694	643	692	855	819	913	1,051	960
TOTAL	4,275	4,829	5,664	6,171	6,845	7,381	7,768	8,337	9,246	9,051
DTCC*										
Current Expense	3,062	2,681	2,964	3,492	3,417	3,441	3,886	4,488	4,630	4,717
Debt Service	683	548	494	444	485	581	605	676	715	782
TOTAL	3,745	3,229	3,453	3,936	3,902	4,022	4,491	5,164	5,345	5,499

*FTE (Full-time equivalent) figures used for calculation include Parallel Program students.

Table 7

Net State Support For Current Expenses Per FTE For The Three Public Colleges in Constant (FY76) Dollars

FY	UD	DSC	DTCC
76	$1,633	$2,733	$1,981
77	1,592	2,882	2,109
78	1.511	2,805	2,404
79	1,529	2,903	2,504
80	1,463	3,069	1,994
81	1,659	3,340	1,991
82	1,707	3,376	2,133
83	1,705	3,536	1,963
84	1,660	3,558	1,876
85	1,675	3,550	1,986
86	1,745	3,633	2,196
87	1,745	4,011	2,266
88*	1,722	3,800	2,215

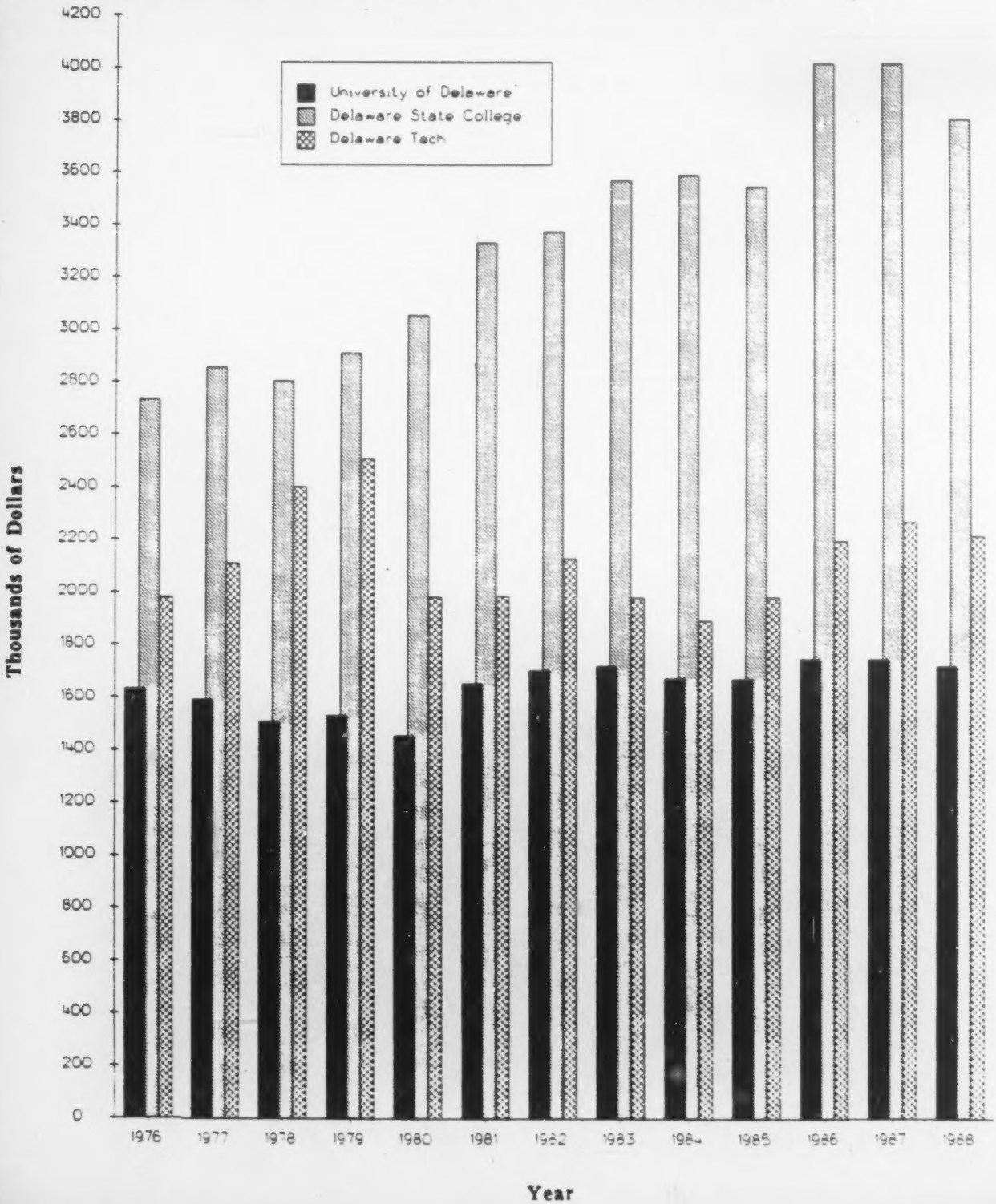
*Inflation measured by the Higher Education Price Index. (Estimated to be 4.2% for FY88.)

Table 7 compares State appropriations for operating expenses (not debt service) at the three public institutions in constant 1976 dollars, using the Higher Education Price Index.

Table 7 indicates that appropriations in support of the University of Delaware on a per student basis increased 5.4% ($89) in constant dollars from 1976 to 1988. Support for Delaware State College grew 39% ($1,067) in constant dollars from 1976 to 1988. Delaware Technical and Community College saw a 1976-1988 increase of 11.8% ($234) in constant dollars.

Figure 2

Net State Support For Current Expenses Per FTE For The Three Public Colleges in Constant (FY76) Dollars



The percentage increases in constant (1976) dollars for each institution from 1987 to 1988 were:

University of Delaware	-1.3%
Delaware State College	-5.2%
Delaware Technical & Community College	-2.2%

Total Expenditures Per Student

While Tables 6 and 7 above break out net State support on a per student basis, these figures should not be interpreted as total expenditures per student at each institution. In addition to State support the student's education is supported by tuition, endowment earnings, gifts and donations, and federal funds.

The most comparable data available to the Commission for the comparison of total per student costs at each of the public colleges is "Education and General Expenditures" per FTE. E & G expenditures include all institutional expenditures except auxiliary services and other independent operations.

Table 8 compares the three public institutions on this measure. The data in Table 8 were compiled on the same basis as that for Table 9, explained below, with one exception. Figures in Table 8 do not include State appropriated debt service.

Table 8

Total Education and General Expenditures Per FTE

For Three Public Colleges For The Year Completed

June 30, 1987

	FTE	Total E & G Expenditures	Total E & G Expenditures Per FTE
UD	15,578	$189,140,092	$12,141
DSC	1,851	21,563,861	11,649
DTCC	4,724	30,151,600	6,383

An overall State perspective on higher education costs per student is contained in Table 9. To obtain uniform comparisons, the following procedures have been utilized. The base figures for all colleges were taken from Part B, Line 12 of the IPEDS Financial Statistics form. This figure represents Total Educational and General Expenditures. It includes all expenditures except those for auxiliary services and independent operations (e.g., dormitories, food service).

Since the independent colleges listed in Table 9 make mortgage payments for their physical plant, and include these within total E & G expenditures, the debt service paid by the State for the public institutions is added to their Total E & G expenditures. In addition, the State appropriation made to the DTCC President's office is added to the E & G expenditures of the DTCC campuses - again, for uniformity. FTE figures used are derived by adding 1/3 of the part-time students to the full-time student enrollment.

Table 9

Total Education and General Expenditures Per FTE
For all Delaware Colleges For The Year Completed
June 30, 1987

	FTE	Total E & G Expenditures	Total E & G Per FTE
UD	15,578	$195,309,992	$12,537
DSC	1,851	23,341,261	12,610
DTCC	4,724	33,847,800	7,165
Goldey Beacom	1,117	$6,431,647	$5,757
Wesley	803	5,715,479	7,117
Widener, DE*	2,006	14,037,240	6,998
Wilmington	736	3,089,898	4,198

*Widener, DE includes Brandywine College and Delaware Law School.

It should be noted here, for those who might be inclined toward conjecture about the nature of the variance in costs among the colleges, that the variance cannot be totally attributed to management efficiency. Some varieties of education are less expensive than others. Some institutions are comprehensive colleges offering a wide range of majors while others are single purpose institutions. Additionally, some colleges offer physical education, music, art, sports programs, social and cultural programs, and the like. All of these facets of the colleges' program add to the cost and to the students' education.

BOND AUTHORIZATIONS FOR POSTSECONDARY EDUCATION

Each year, in addition to operating funds requested by the state supported colleges, requests for bond authorization for major capital items are made. The requests granted are included in the annual bond bill, and ultimately the costs are reflected in the college budgets of the future as debt service, maintenance and utility expenditures.

Because the bond authorizations for major capital expenditures reflect institution expansion and maintenance (as in renovation), because they are reflective of programmatic needs, and because they are ultimately reflected as ongoing operational expenses, the Commission feels that such requests should be examined as an integral part of the budget review process. Thus, the Commission includes here the following review of bond authorizations providing a look at the past and overview of projected requests.

Table 10

Summary of Bond Bill Authorizations FY76-88

and Current Requests

SUMMARY

(details follow: see Tables)

Year	U of D	DSC	DTCC	Total
FY76-FY88 Authorized % of Total	$41,158,000 50%	$14,377,513 18%	$25,983,740 32%	$81,519,253
FY88 Authorized % of Total	$1,545,000 26%	$1,134,100 19%	$3,298,040 55%	$5,977,140
FY89 Request	$7,875,000	$6,074,000	$9,305,500	$23,254,500
FY90 Request	$13,400,000	$5,710,500	$7,931,300	$27,041,800
FY91 Request	$13,900,000	$9,505,000	$1,700,000	$25,105,000

Notes: (1) Figures for FY76 through FY87 are authorized levels, which are not necessarily equal to final expenditures.

(2) Figures for FY88-FY91 are requests projectd by the institutions (BUD41: Capital Budget Summary).

Table 10 shows the distribution of authorized capital spending among the three public institutions. Authorized amounts for FY88 differ, in terms of percentage distribution, from the distribution trend recorded for the thirteen year period 1976-1988. The University's share is greater over the thirteen year period, but Delaware Tech received the majority of authorized funding for FY88. Delaware State Colleges' share is about the same in FY88 as it has been over the extended period.

Table 11 breaks the thirteen year period into two segments to further examine the capital funding trend. It is apparent that a shift in capital funding distribution has occurred during the period in the direction of a more even distribution among the three institutions. Whether this trend in capital funding is appropriate for the State's system of higher education can only be a matter of conjecture without further detailed study.

Table 11

Comparison of Amounts and Percentage Distribution of Higher Education Capital Funds for Two Periods

	U of D	DSC	DTCC	Total
FY76-81 (6 years)	$18,085,000 74%	$2,353,000 10%	$4,015,300 16%	$24,453,300 100%
FY82-88 (7 years)	$23,073,000 40%	$12,024,513 21%	$21,968,440 39%	$57,065,953 100%

In an environment in which no institution is an isolated entity and all must compete for limited capital funds, methods of evaluation must be available to those agencies responsible for approving or providing the resources requested by the colleges.

Table 12

Capital Budget Requests FY89-FY91

As Presented, In Rank Order, In Institutional Request

Delaware State College	1989	1990	1991
1. Minor Capital Improvements	$300,000	$300,000	$300,000
2. Bookstore Addition	$200,000		
3. Wall Completion	$150,000		
4. Laws Hall	$196,000		
5. Evers Hall	$304,000		
6. Exter. Renovation, Humanities Bldg.	$1,000,000		
7. Asbestos Removal	$200,000		
8. Expansion of Science Center	$3,000,000		
9. Business Administration Building	$500,000	$4,000,000	$525,000
10. Baseball Field Renovations	$100,000		
11. Renovate Park Place	$75,000		
12. Press Box Renovation	$49,000		
DSC TOTALS	$6,074,000	$4,300,000	$825,000

Table 13

Capital Budget Requests FY88-FY91

As Presented, In Rank Order, In Institutional Request

Delaware Technical & Community College	1989	1990	1991
1. Bldg. Construction & Renovation - Terry	$5,500,000	$5,500,000	
2. Trades & Industry Bldg. - Southern	$1,000,000	$300,000	
3. Instructional Computers - Terry	$31,300	$31,300	
4. Equipment - Wilmington	$444,500		
5. Equipment - Stanton	$372,500		
6. Computer Equip. - College-wide - Pres.	$98,000		
7. Computer Equip. - College-wide - Pres.	$80,000		
8. Capital Equipment	$217,200		
9. Systems Enhancement - Wilmington	$47,500		
10. Systems Enhancement - Stanton	$47,500		
11. Systems Enhancement - Terry	$47,500		
12. Equipment - Terry	$142,000	$100,000	$100,000
13. Office Computer Equip. - Pres.	$6,600		
14. Minor Capital Improvement - Southern	$232,000		
15. Minor Capital Improvement - Terry	$183,300		
16. Office Furn./Equip. - Pres.	$10,900		
17. Storage & Maint. Bldg. - Terry	$44,700		
18. Purchase/Renovate Bldg.	$400,000		
19. Higher Education Facility	$400,000	$2,000,000	$1,600,000
DTCC TOTALS	$9,305,500	$7,931,300	$1,700,000

Table 14

Capital Budget Requests FY89-FY91

As Presented, In Rank Order, In Institutional Requests

University of Delaware	FY89	FY90	FY91
1. College of Human Resources, Classroon/Lab Additions	$2,500,000		
2. Department of Chemistry, Building & Major Renovation	$300,000	$4,500,000	$4,500,000
3. Computer & Mathematical Science Laboratory Building	$275,000	$3,600,000	$3,500,000
4. Undergraduate Laboratory Instruction Equipment	$2,100,000	$2,200,000	$2,400,000
5. Building Renewal	$2,700,000	$3,100,000	$3,500,000
UD TOTALS	$7,875,000	$13,400,000	$13,900,000

Table 15

Capital Authorizations for Postsecondary Education FY76-FY87

Year	University of Delaware		Delaware State College		Delaware Technical & Community College	
FY76	$7,355,000	$7,000,000 Life Science Bldg. $210,000 Del. Sea Grant $145,000 Swine Program	$250,000	Lockerman Hall Renovation	$529,000	$100,000 Wilm. Demolition & Clearance $17,000 Payback: Advance Land Acquisition $20,000 Georgetown Campus Sewer $392,000 Kent Campus Furnishing
FY77	$1,350,000	$950,000 Lilfe Science Equip. $400,000 Ag. Science Bldg. Design	$150,000	Health & Phys. Ed. Facility	$268,300	$200,000 Wilmington Campus $18,300 Stanton Campus Equip. $50,000 Southern Campus Parking
FY78	$3,030,000	$3,000,000 Ag. Science Bldg. $30,000 Ag. Sub. Station	$450,000	Football Field Stadium Bleachers	--	
FY79	--		--		$132,000	Southern Campus Facilities Survey and Design
FY80	$3,400,000	$270,000 Eng. Bldg. Design $30,000 Georgetown Sub. Station $3,100,000 Ag. Science Bldg.	$403,000	$203,000 Minor Capital Repairs $200,000 Football Stadium Bleachers	$796,000	$400,000 Southern Campus Library Design $16,000 Stanton Campus Roads $320,000 Stanton Campus Equip. $35,000 Terry Campus Maintenance Garage $25,000 Terry Campus Motel Demolition
FY81	$2,950,000	$450,000 Lewis Marine Complex Site Improvement $2,500,000 Engineering Building Phase I	$1,100,000	$100,000 Minor Capital Improvement $1,000,000 Gymnasium Renovation and Addition	$2,290,000	$15,000 Terry Equipment $700,000 Terry Indus. Trng. $500,000 Southern Campus Roof Repair $1,000,000 Southern Campus Library $75,000 Wilm. Campus Bldg. Renov.
FY82	$4,500,000	$4,500,000 Engineering Building Phase II	$1,950,000	$1,500,000 Health & Phys. Ed. Bldg. $350,000 Dormitory Renovation $100,000 Minor Capital Improvement	$4,236,000	$3,500,000 Library, Southern $136,000 Equipment, Terry $600,000 Land Acquisition and Facility Development

Capital Authorization for Postsecondary Education FY76-FY87 (Continued)

Year	University of Delaware		Delaware State College		Delaware Technical & Community College	
FY83	$4,625,000	$4,500,000 Engineering Building $110,000 Morris Library Addition (design) $15,000 Agriculture Substation Equipment	$2,400,000	$1,600,000 Tubman Hall and/or Dining Hall $350,000 ETV Bldg. Improvements $350,00 New Maintenance Facility $100,000 Misc. Minor Capitol Improvement	$2,357,000	$650,000 Administration Building $75,000 Terry Campus-equipment $480,000 Stanton Campus-equipment $72,000 Wilmington Campus-equipment $30,000 HVAC - MCI (Terry) $950,000 Wilmington Campus (Land Acquisition, Facil. Dev.) $100,000 Southern Campus Misc.-MCI
FY84	$2,550,000	$2,500,000 Morris Library Addition $50,000 Ag. Substation, Irrigation	$2,200,000	$2,100,000 Tubman Hall & Dining Hall Completion $100,000 Minor Capital Improvement	$2,850,000	$100,000 Stanton, equipment $100,000 Terry, equipment $50,000 Southern, equipment $50,000 Wilmington, minor capital $50,000 Terry, Administration Bldg. $2,500,000 Wilmington, New Building
FY85	$3,750,000	$3,500,000 Morris Library Addition $250,000 Central Fire Control Panel		$1,000,000 Delaware Hall-completion $30,000 Old Library Renovation $370,000 Tubman/Conrad Hall - Completion $615,000 Pedestrian Overpass - Rt. 13 $100,000 MCI		$4,500,000 Wilmington Campus II/III $100,000 Terry Campus - MCI $20,000 Statewide - MCI $50,000 Stanton & Georgetown equip.
FY86	$3,865,000	$2,890,000 Morris Library Addition $750,000 Composit Manufacturing Bldg. $40,000 Swine Research Facility $125,000 Athletic Complex: Plan/design		$150,000 Renovation: Lookerman Hall $170,000 Renovation: Library $350,000 Air Conditioning $200,000 Minor Capital Improvement		$250,000 Bldg. Design/Const. - Terry $75,000 Instructional Computer $3,000,000 Indust. Trng. Center: Wilmington $200,000 Minor Capital Improvement
FY87	$2,298,000	$1,750,000 Composit Manufacturing. Bldg. $100,000 Allison Hall planning/ engineering $125,000 Pike Creek Greenway $200,000 Addition to Penny Hall (Geol. Survey) $123,000 Addition to Research & Education Center (Georgetown)	$1,355,413	$150,000 Renovation: Lookerman Hall $100,000 Parking & Road Resurfacing $845,000 Renovation: Delaware Hall & Science Center $234,913 Minor Capital Improvements $25,500 Van: Handicapped	$1,032,400	$31,300 Terry - Computer $119,700 Stanton - Equipment $218,300 Wilmington - Equipment $24,600 Pres. Off. - Computer Equipment $125,000 Southern - Minor Capital Improvements $130,500 Terry - Equipment $125,000 Stanton - Access Road Repaving $198,000 Wilmington - Parking Lot Paving $30,000 Southern - Trades & Tech. Bldg. Planning $30,000 Southern - Museum Planning

Capital Authorization for Postsecondary Education FY76-FY88 (Continued)

Year	University of Delaware		Delaware State College		Delaware Technical & Community College	
FY88	$1,545,000	$1,300,000 Alison Hall Addition $45,000 Infrastructure $200,000 Athletic Facilities Study	$1,134,100	$850,000 Window/AC, Science Bldg. $22,000 Park Place, renovate $250,000 Minor Capital Improvements $12,000 Tubman Hall	$3,298,040	$1,000,000 N. Kent Vo-Tech., renovate $31,000 Instructional Computer, Terry $1,030,740 Bldg. Renovate, Stanton $11,000 Lighting, Southern $75,000 Roof, Terry $200,000 MCI & Equipment $700,000 Trades & Industry Bldg., Southern $250,000 Museum, Southern
TOTALS:						
	$41,158,000		$14,377,513		$25,983,740	

During the thirteen year period since FY1976, more than $81 million has been authorized by the State for higher education buildings, equipment and major renovation projects.

Capital requests and the funding granted seem to be based on unwritten assumptions which over the years have served in the absence of agreed-upon State policy. For example, it is generally understood that dormitory buildings and dining halls at the University of Delaware are not funded in the State's capital budget, yet such facilities are funded at Delaware State College. Similarly, it seems to have been assumed that sports facilities at the University of Delaware were not funded through the State's capital budget, yet in FY88 funding for an evaluation of athletic facilities at the University was included. In more general terms, non-credit continuing education and industrial training seem to be regarded as self-supporting activities, but buildings required to house these activities may or may not be included in the bond bill.

It seems generally understood that planning and design funds authorized in the capital budget are without doubt followed by construction funds. Requests for construction, therefore, need not be specific since planning and design functions have not been completed when the funding cycle is put in place.

Justification for facility requests take on a variety of form and substance in the State. No standard format or standard set of data about enrollment, space utilization, or other relevant items are required. Appeals for new construction can be made on the basis of State pride, economic development, geographic fairness, enrollment growth or the need for new programs. Any of these may represent a legitimate basis for approval, none represent an agreed upon continuing priority.

Considering the extent of public higher education's physical plant, consisting of 5 to 6 million square feet of space in about 140 buildings, on approximately 2,000 acres of land, it would

appear irresponsible to consider requests for new buildings in isolation from an overall facilities plan, especially when requests from the institutions are in competition with each other and with facilities requests from other agencies of the State.

It is recognized that the three public institutions in the State do plan for their space needs, each within their own system. In fact, the University of Delaware has recently hired a consulting firm to study its land holdings and space needs. It would be a waste of time and resources to attempt to duplicate an institution's planning process outside of the institutional setting. The process at the State level must be a more generalized planning process within which this institutional planning may take place.

The State process should allow for those legitimate differences which exist between institutions and which result in differing facilities requirements. A system which is based on a single, fixed criterion for each type of space for all types of institutions would be inappropriate. At the same time, the State cannot make reasonable and equitable decisions on competing requests if comparative data on facilities are not available. "The 1985 Report of the Task Force to Study Higher Education in Delaware" (a task force commissioned by the Council of Presidents of the State supported colleges) states that:

> "The task force could not make comparative assessments of the quantity or quality of space available to each institution because there are no common reports of space allocation or utilization. Each institution provided the task force with information about the number of assignable square feet it maintained in several categories of academic space, but there appear to be no discernable patterns among the institutions. We recommend that comparative reports of space allocations and utilization be developed." (p. 32)

The Delaware Postsecondary Education Commission, in the last five annual issues of this Data Book has recommended the following:

> "Specifically, the Commission recommends that the State undertake, with the assistance of educational facilities experts, a comprehensive facilities inventory and space utilization study to assess current and future facility needs.
>
> The cost of such a project, relative to the pattern of capital expenditures would be insignificant. The assistance rendered in making capital fund decisions would be extremely valuable." (1987, p. 22)

Many states have established facilities planning guidelines, but such guidelines cannot be adopted from other states. The facilities plan of any state must reflect the higher education goals and objectives and the unique array of institutional characteristics within the state's system of higher education. Activity and people create space needs, and inherent in any space planning system is the assumption of a rational means for determining the space requirements of the system as a whole and for individual institutions within the system based on appropriate activities to take place within the system.

The small size of Delaware's higher education establishment means that planning should be less difficult than in larger states, not less needed.

In recognition of this need, the Commission recommends that the State contract with an organization, or establish a task force of higher education facilities experts to:

1. Provide a complete survey of the physical plant assets of the three State supported institutions, reporting in standard format the gross and assignable areas of various categories of space (i.e., class, lab, office, etc.)

2. Provide an assessment of the condition of the facilities in the inventory.

3. Provide recommendations for maintaining the currency of the inventory.

4. Provide recommendations related to the need for new construction, demolition, renovation, and maintenance.

5. Provide guidelines for evaluation of future requests for new construction, renovation and maintenance.

At the same time, a second task force should be established to consider specific policy issues related to higher education facilities in the State of Delaware. For example, attention should be focused on questions such as whether research facilities should be funded by the State or by research contract overhead; whether dormitories, recreation facilities or only academic facilities should be funded; or whether priority should be attached to particular categories of buildings.

Further, it is recommended that methods of coordination be established between the process of approving operating budget requests and the process of approving capital requests.

Absent the perspective available through such studies, the Commission can provide only the following general priorities for evaluation of capital requests.

1. First priority should be given to projects aimed at eliminating health, safety or fire hazards.

2. Second priority should be for projects which eliminate barriers to access for the handicapped.

3. Third priority should be for those projects which provide future operating cost avoidance (such as energy conservation, improved utility management or building maintenance).

4. Fourth priority should be given to projects which protect the institutions' physical plant assets through systematic building renewal (renovation and planned maintenance programs). Here, the Commission recommends that the State establish an ongoing planned maintenance and renovation fund based on some determined percentage of institutional plant assets. The institutions could then develop coherent long-range renovation plans which do not compete with new building requests.

5. Fifth priority should be for projects which remodel and/or alter existing structures where the cost is significantly less than new construction.

6. Sixth priority should be for projects to construct new facilities.

Both major remodeling and new structures should be evaluated on the basis of program needs and space utilization studies, as per the study proposed above.

TUITION

A significant component of financing higher education is tuition revenue. For independent institutions, tuition normally comprises a larger portion of the institutional revenue budget than at a public institution. At no institution, however, does tuition pay the entire cost of education. In addition to tuition revenue, public institutions derive support from state and/or local governments, while independent institutions receive more support from private philanthropy.

The setting of tuition and fee rates is important not only because of the impact it has on the institution's budget, but because it may also affect enrollment. In the following section, tuition and fees of Delaware's colleges are presented in historical perspective. For the public institutions, comparisons are also made with other economic measures, and with peer institutions in the region, in order to more completely describe the educational marketplace within which these institutions operate.

A fifteen-year history of tuition and fee charges at Delaware's public and independent institutions is presented in Table 16. A relatively stable relationship between tuition at these two institutional sectors existed during the five years between 1979-80 and 1984-85. For the last three years, the ratio has dropped slightly, due mainly to the smaller average increases in tuition at the independent institutions during that time period. The average tuition increase for the independent sector in this three year period was 8.6%, compared with 15.8% for the public sector.

During the fifteen-year period presented here, the gap between tuition and fees at public colleges and those at independent colleges has increased from $1,230 to $3,368 (173.8%).

Table 16

Tuition & Fee Charges per Academic Year at Public & Independent Colleges in Delaware

1973-1988

	Public Colleges			Independent Colleges					
Year	Univ. of Delaware	Del. State College	DTCC	Wilm. College	Wesley College	Brandywine College	Goldey Beacom College	Ratio of Avg. Tuitions Independent To Public Colleges	Difference Between Avg. Public & Avg. Private T & F
1973-74	585	345	390	1,900	2,000	1,520	1,260	3.8:1	1,230
1974-75	720	352	390	1,900	2,420	1,520	1,360	3.7:1	1,313
1975-76	795	356	390	1,900	2,530	1,850	1,480	3.8:1	1,426
1976-77	978	400	390	1,900	2,530	1,950	1,480	3.3:1	1,376
1977-78	978	440	514	2,150	2,980	1,950	1,620	3.4:1	1,531
1978-79	988	440	514	2,150	3,260	2,300	1,840	2.7:1	1,741
1979-80	990	470	514	2,450	3,710	2,500	1,990	4.0:1	2,005
1980-81	998	515	514	2,750	3,940	2,800	2,176	4.3:1	2,241
1981-82	1,222	595	591	2,900	4,430	3,155	2,560	4.1:1	2,458
1982-83	1,367	650	591	3,170	5,190	3,600	2,876	4.3:1	2,840
1983-84	1,590	650	591	3,220	5,190	3,950	3,228	4.1:1	2,953
1984-85	1,710	695	627	3,330	5,294	4,260	3,420	4.0:1	3,065
1985-86	2,100	810	699	3,420	5,524	4,650	3,900	3.6:1	3,171
1986-87	2,205	906	714	3,640	5,900	5,100	3,900	3.7:1	3,380
1987-88	2,385	1,000	771	3,790	5,900	5,420	3,900	3.4:1	3,368

*Charges listed reflect the institutions' "full-time" tuition. When no set full-time tuition is established, 15 credit hours per term is used.

Table 17 compares tuition and fee charges since 1975 with three measures of the cost of living, indexed to 1972 base year figures. In comparing tuition increases with increases in the Consumer Price Index, Higher Education Price Index, and the Delaware Household Disposable Income, only two colleges (Delaware Tech and Wilmington College) have increased at a rate which is less than inflation as measured by the CPI and HEPI.

As a measure of the relative affordability of college for Delaware families, the DHDI is an interesting index. Five of Delaware's seven institutions have increased costs at a rate greater than the DHDI (indexed to 1972 costs). At these institutions (University of Delaware, Delaware State College, Wesley College, Brandywine College, and Goldey Beacom College) higher education is relatively more expensive than it was in 1972 for Delaware families. In itself this is not necessarily a negative finding, since the proportion of family income which is expended for any number of basic household needs and/or luxuries has undoubtedly been altered during the same period of time.

The trend for college costs to outpace inflation is national, has been steady for over a decade, and most experts predict that it will continue into the foreseeable future.

The U. S. Department of Education has attributed rapidly rising tuitions to college inefficiency and reliance on the availability of financial aid to help students meet their costs. Colleges have stressed the labor intensive nature of college education as a primary reason for tuition increases. Independent analysts have attributed the increases to substantial cost increases in nonacademic operations, including institutional marketing costs, administrative salaries, student services, and student recruitment devices such as non-need-based merit scholarships. Whatever the underlying reasons for the comparatively greater cost of college over the past decade, Delaware's trends mirror the situation nationally.

Table 17

Tuition & Fees vs. Economic Parameters

The public and independent colleges are compared using index numbers of tuition cost. The Consumer Price Index, Delaware Household Disposable Income, and the Higher Education Price Index are provided for comparison. In all cases the base year is 1972.

Year	Univ. of Delaware	Del. St. College	Delaware Tech.	Wilmington College	Wesley College	Brandywine College	Goldey Beacom College
1975-76	167	115	111	100	128	121	123
1976-77	205	130	111	100	128	128	123
1977-78	205	143	146	113	150	128	135
1978-79	208	143	146	113	165	151	153
1979-80	208	153	146	129	187	164	165
1980-81	210	167	146	145	199	184	181
1981-82	257	194	169	153	224	208	213
1982-83	288	212	169	169	263	237	240
1983-84	335	212	169	169	263	260	269
1984-85	360	226	179	175	268	280	285
1985-86	442	264	200	180	280	306	325
1986-87	464	298	204	232	314	336	325
1987-88	502	326	220	241	314	357	325

	Consumer Price Index[1]	Del. Household Disposable Income[2]	Higher Education Price Index[3]
1975-76	135	134	130.5
1976-77	142	139	138.9
1977-78	152	150	148.2
1978-79	160	162	159.8
1979-80	189	177	175.5
1980-81	211	184	194.3
1981-82	223	205	213.6
1982-83	238	216	227.4
1983-84	241	237	239.7
1984-85	244	254	251.7
1985-86	262	264	255.8
1986-87	264	285	266.5
1987-88	281	295	271.9*

[1]Bureau of Labor Statistics; January figure used for each year.
[2]From a series published by Sales & Marketing Management; a calculation of effective buying income.
[3]From Research Associates of Washington.

Delaware families do not limit their college attendance decision to institutions located within the state. To provide some perspective, at least with respect to tuition and fee levels at peer institutions in nearby states, Table 18 presents a six-year history of in-state tuition and fees, and current-year non-resident tuition and fees.

Increases in state resident tuition and fees at state-supported universities ranged from 4.4% to 12.9% (average 8.4%), compared with 8.2% at the University of Delaware. The University ranks fifth out of the seven selected institutions (ranked high to low). The University of Maryland and the University of Virginia have lower tuition and fees. Although prior year out-of-state tuition and fee charges are not shown in the table, one-year increases in out-of-state charges for these seven institutions ranged from 6.0 - 11.5% (average 9.1%). The University of Delaware increased its charges to non-residents 11.5%, more than any of the peer institutions.

Delaware State College is compared with both four-year state colleges in this region and with 1890 Land Grant Colleges. Tuition and fee increases for four-year state colleges ranged from 0% to 30.5% (average 9.4%). Delaware State College's charges increased 10.4%. Even with this increase, Delaware State College remains the least expensive of the selected four-year colleges. It ranks ninth of the thirteen 1890 Land Grant Colleges (from high to low). One-year tuition increases in the 1890 Land Grant schools averaged 14.8%, compared with Delaware State College's 10.4%. One-year increases in charges to out-of-state residents at four-year colleges ranged from 0% to 34.2% (average 9.2%); at the 1890 Land Grant Colleges out-of-state rates increased from 0% to 29%; Delaware State College's non-resident charges increased by 10.5%. Delaware State College ranks eleventh of twelve (ranked from high to low) in charges to non-residents among the four-year colleges, and eleventh of thirteen among the 1890 Land Grant Colleges.

Table 18

Comparative Annual Tuition and Fees
Public Institutions in Adjacent States

State-Supported Universities	Resident Tuition and Fees						1987-88 Out-of-State
	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88	1987-88
Penn State	2,118	2,312	2,562	2,760	2,996	3,292	6,610
Temple	2,616	2,752	2,890	3,092	3,350	3,564	6,222
U. Pittsburgh	2,583	2,680	2,940	3,010	3,220	3,486	6,836
Rutgers	1,681	1,854	1,867	2,120	2,246	2,535	4,665
U. Maryland	1,185	1,332	1,410	1,496	1,601	1,740	4,846
U. Virginia	1,334	1,570	1,846	2,040	2,250	2,350	5,800
U. DELAWARE	1,367	1,590	1,710	2,100	2,205	2,385	5,800
State Colleges (4 Year)							
West Chester Univ.(PA)	1,480	1,480	1,570	1,731	1,811	1,985	3,421
Lincoln Univ. (PA)	1,715	1,730	1,830	2,089	2,130	2,130	3,130
Cheyney State (PA)	1,480	1,480	1,730	1,775	1,880	2,030	3,466
Montclair State (NJ)	1,250	1,260	1,320	1,435	1,538	1,645	2,305
Glassboro State (NJ)	1,038	1,038	1,046	1,120	1,521	1,680	2,280
Kean College (NJ)	888	900	1,328	1,395	1,485	1,552	2,152
Salisbury State (MD)	1,206	1,354	1,472	1,656	1,886	1,996	3,394
Towson State (MD)	1,222	1,322	1,403	1,514	1,609	1,734	3,132
Morgan State (MD)	1,216	1,281	1,372	1,497	1,544	1,648	3,275
Virginia State	1,303	1,430	1,455	1,800	1,800	2,349	4,159
U. of MD Eastern Shore	968	1,128	1,252	1,350	1,502	1,684	4,630
DELAWARE STATE	650	650	695	810	906	1,000	2,300
1890 Land-Grant Colleges							
Alabama A & M Univ.	682	800	880	980	980	1,134	2,026
Ft. Valley St.Coll.(GA)	570	990	1,101	1,230	1,326	1,404	3,606
Kentucky State Univ.	674	826	880	936	992	1,120	3,120
Southern Univ. (LA)	550	550	662	762	1,124	1,130	2,652
Alcorn State (MS)	825	875	975	1,150	1,550	1,550	2,732
Lincoln Univ. (MO)	516	600	700	806	1,220	1,290	2,460
N. Carolina A & T	819	866	888	938	938	989	4,481
Langston Univ. (OK)	453	453	479	629	656	809	1,610
S. Carolina State	810	900	1,050	1,150	1,200	1,450	2,980
Texas Southern	288	532	532	N/A	480	870	3,990
Prairie View A & M (TX)	354	366	473	720	997	1,038	3,991
Tennessee State Univ.	792	792	878	954	1,076	1,148	3,752
DELAWARE STATE	650	650	695	810	906	1,000	2,300

Table 18 (Continued)

Community Colleges	Resident Tuition and Fees						1987-88 Out-of-State Tuition
	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88	
Bucks County Comm. College (PA)[1]	1,008	1,078	1,144	1,144	1,144	1,248	4,280
Delaware County Comm. College (PA)[2]	726	726	750	846	894	966	3,078
Community College of Philadlephia (PA)[3]	966	966	966	1,032	1,104	1,210	3,562
Camden County College(NJ)	408	570	630	754	814	902	962
Mercer County Comm. College (NJ)[1]	528	690	750	780	840	890	2,790
Middlesex County Comm. College (NJ)[1]	730	730	750	750	780	976	3,568
Salem Community Coll. (NJ)[1]	600	730	750	874	1,025	1,078	1,538
Chesapeake College (MD)[4]	440	509	549	549	602	667	3,100
Wor-Wic Tech. Comm. College (MD)[1]	456	504	538	561	612	821	3,912
Cecil Community Coll. (MD)[1]	510	540	675	735	795	880	2,490
DELAWARE TECHNICAL & COMMUNITY COLLEGE	591	591	627	699	714	771	1,905

Source: College admissions offices.

*The funding bases of community colleges often include support from counties, cities, school districts, or other municipal governments. The "resident" tuition and fees given here are the lowest tuition and fees charged for any category of student. The following footnotes specify for each college which residence category qualifies for the tuition and fee charges given here.

1 county resident
2 resident of sponsoring school district
3 city resident
4 resident of five-county area

Increases in tuition and fees to in-state students at eleven community colleges ranged from 5.2% to 34.2% (average 12.5%). Delaware Technical & Community College's (DTCC) in-state charges increased by 8.0%. Among its peer institutions, DTCC moved from ninth to tenth in resident charges (ranked high to low) between 1986-87 and 1987-88. DTCC increased its out-of-state tuition and fees by 6.7%, compared with the 14.5% average for similar institutions in the region, but retained its ranking of ninth of eleven (ranked high to low) in comparison of out-of-state tuition and fees.

While there is no state policy in Delaware pertaining to tuition charges at public colleges and there are no guidelines, an indirect relationship does exist in terms of budget requests and appropriations, where the issue of tuition increases serves as a catalyst.

To put this into a somewhat broader financial perspective, Table 19 compares state resident tuition charges with per student expenditures for the three public institutions. It should be pointed out that since both Delaware State College and the University of Delaware have significant percentages of non-state-resident students, the percentage that tuition constitutes of total Education and General Expenditures* is underrepresented by resident tuition charges alone. Total tuition and fees collected (for both in-state and out-of-state residents) is a larger percentage of expenditures than is reflected in Table 19 (see Table 20 for total tuition and total expenditures) for these two institutions. However, it is nonetheless instructive to examine the relationship between total expenditures per student and in-state tuition charges. University of Delaware tuition charges as a percentage of per student expenditures have increased by approximately 4% since 1983. Delaware State College charges have risen by 1%, and Delaware Technical and Community College charges as a percentage of expenditures have risen by 0.3%.

*Total Education and General Expenditures is total expenditures of the institution less debt service and auxiliary enterprises.

Table 19

In-State Tuition & Fees at Public Institutions
As A Percentage of Education & General
Expenditures[1] per FTE Student[2]

Fiscal/Academic Year	Education & General Expenditures per FTE Student	Tuition & Fees	T&F/E&G (%)
1987			
UD	12,141	2,385	19.6
DSC	11,649	1,000	8.6
DTCC	6,383	771	12.1
1986			
UD	10,990	2,100	19.1
DSC	12,164	810	6.7
DTCC	6,130	699	11.4
1985			
UD	9,600	1,710	17.8
DSC	9,808	695	7.1
DTCC	5,607	627	11.2
1984			
UD	9,117	1,590	17.4
DSC	9,668	650	6.7
DTCC	5,055	591	11.7
1983			
UD	8,654	1,367	15.8
DSC	8,553	650	7.6
DTCC	5,005	591	11.8

[1]Education & General Expenditures is total expenditures of an institution less debt service and auxiliary enterprises.

[2]FTE student is full-time enrollment plus one-third of part-time enrollment.

Perhaps for state level financial management purposes, a more relevant examination of tuition revenue is the relationship between total Education and General Expenditures and total tuition revenues collected from all students (Table 20). The only significant change in the relationship between these totals for any of the three institutions during the last year is at DTCC. The relationship between tuition and fees and education and general expenditures at DTCC, which had remained remarkably consistent over the past five years, increased over 50% last year (from 9.2 - 14.3%).* Since 1982, tuition and fees at the University of Delaware have increased as a percentage of education and general expenditures, reflecting both recent increases in tuition and an increasing number of non-state-resident students. The trend at Delaware State College, though not dramatic, is generally in the opposite direction, perhaps due to increases in state support resulting from the state's Title VI desegregation plan. The difference among the three colleges in terms of the percentage of total expenditures supported by tuition is very different.

In states where tuition policies exist, most (16 of 20) indicate that tuition is indexed to the cost of education. The outcome of indexing tuition charges to actual cost of education has the advantage of efficiency and predictability, because tuition then increases at a rate directly proportional to the rise in total cost of providing education at an institution. Once the index is established, the setting of tuition levels is removed as a point of controversy in the annual budget process.

*This increase is due to statutory changes resulting in Delaware Tech's retaining certain tuition payments which were previously deposited in the State General Fund.

Table 20

Total Tuition Revenue as a Percentage of Total Education & General Expenditures[1] For Public Institutions

Fiscal/Academic	Education & General Expenditures	Tuition & Fees	T&F/E&G (%)
1987			
UD	189,140,092	68,892,267	36.4
DSC	21,563,861	2,846,766	13.2
DTCC	30,151,600	4,336,800	14.3
1986			
UD	162,628,541	61,567,335	37.9
DSC	19,926,531	2,555,373	12.8
DTCC	23,734,679	2,180,850	9.2
1985			
UD	144,494,086	52,759,924	36.5
DSC	18,154,682	2,271,614	12.5
DTCC	21,895,275	1,992,231	9.1
1984			
UD	132,618,960	46,965,307	35.4
DSC	16,141,469	2,023,110	12.5
DTCC	20,051,152	2,079,926	10.4
1983			
UD	126,371,487	41,322,396	32.7
DSC	13,744,606	2,051,311	14.9
DTCC	20,564,715	2,025,544	9.8

[1]Education & General Expenditures is total expenditures of an institution less debt service and auxiliary enterprises.

FACULTY SALARIES

The strength of the faculty directly influences the quality of academic programs and the reputation of colleges and universities. The development of a strong faculty is a long-term process involving appropriate recruiting strategies, incentives for development of existing faculty and effective allocation of faculty time to institutional missions. The financial resources available to an institution for faculty salaries, though not the sole ingredient, play a very significant part in this long-term building process. A short-term lapse of attention to faculty salaries can have disastrous effects on this process.

Decisions related to the level of State salary increases for FY89 will be made over the next several months, and will directly affect, to varying degrees among institutions, faculty salaries.

With these decisions in mind, the Commission includes the following national data which should be of general use in addressing the issue.

The data presented were processed, tabulated and analyzed for the American Association of University Professors by Mayse Eymonerie Associates.* All salaries are converted to reflect full-time nine-month positions and do not include fringe benefits. All salaries presented are for the 1986-87 academic year. Current year salary increases may have altered the relative standings shown. Nationally faculty salaries increased 6.6% from 1985-86 to 1986-87, down from the previous year's increase of 7.3%.

In presenting "national average salaries" the Commission recognizes the ultimate incompatibility of paying mediocre salaries and aspiring to a better than mediocre system of higher

*"The Annual Report of the Economic Status of the Profession 1986-87", ACADEME, March-April 1987.

education. The Commission, therefore, does not recommend the national averages as targets for Delaware institutions.

The data presented in Table 21 are separated into institutional categories using the American Association of University Professors (AAUP) system which identified institutions in Categories I-IV, as follows:

Category I	University Level: institutions that offer the doctorate, and the most recent three years conferred an average of 15 or more doctorates in at least three disciplines.
Category IIA	College Level: institutions that award degrees above the bachelor's degree but do not qualify for Category I.
Category IIB	Bachelor's Degree Level: award primarily the bachelor's degree.
Category III	Two-year College Level.
Category IV	Institutions without ranks.

Table 21 presents average salaries at Category I, IIB, III and IV institutions at five percentile ranking points. The average salaries by rank of comparable Delaware institutions are listed on the right with arrows indicating their relative percentile positions. While DTCC is assigned to Category IV because it does not use faculty rank, Category III is also included here because community colleges in Pennsylvania, New Jersey and Maryland do use academic rank and are classified in Category III. Many community colleges in other states are classified, like DTCC, as Category IV.

Table 21

Average 9-month 1985-86 Salaries by AAUP Category, By Rank at Four National Percentile Points

Percentile	95	80	60	40	20	
Category I						UD
Professor	62.4	55.9	50.3	46.7	42.8	50.3
Associate	42.8	39.4	37.0	35.3	32.5	35.6
Assistant	35.7	32.9	30.6	29.3	27.8	28.5
Instructor	29.3	25.8	23.8	22.4	20.5	21.5
Category IIB						DSC
Professor	46.2	38.5	34.2	30.5	27.1	*
Associate	35.2	31.5	28.6	26.1	23.3	*
Assistant	28.4	25.9	24.1	22.4	20.3	*
Instructor	25.5	22.4	20.5	18.9	17.5	*
Category III						
Professor	41.8	38.5	35.3	32.5	30.1	
Associate	36.0	32.8	30.6	28.7	25.8	
Assistant	30.5	27.9	26.2	24.4	21.5	
Instructor	27.4	23.8	22.3	20.8	18.7	
Category IV						
No Rank	40.5	35.0	29.5	26.3	22.5	29.2**

*Delaware State College salary data not included in the 1986-87 AAUP study.
**Southern Campus - 30.8, Terry - 28.1, Wilmington/Stanton - 28.8

For a regional comparison the three Delaware institutions are compared with peer groups of nearby institutions. The institutions used in Table 22 are the institutions that the Commission has traditionally used for tuition comparison purposes. All of the UD comparison institutions are Category I universities. Delaware State is compared to several state colleges which are classified as Category IIA. These institutions offer academic degrees beyond the Bachelor's in several fields - in most cases Master's degrees. The community colleges in neighboring states are classified as Category III institutions because they maintain academic ranks. Delaware Tech., like community colleges in many other states, is classified as Category IV, using no academic ranking.

Table 22

Comparative 9-Month Average Salaries (thousands) By Rank For 1986-87 At Public Institutions In Neighboring States

State Supported Universities	AAUP Categ.	Prof.	Assoc.	Asst.	Instr.	Weighted Avg.
Penn State U	I	$50.4	$36.8	$30.5	$19.6	$37.1
Temple U	I	46.3	36.2	30.0	22.6	38.4
U Pittsburgh	I	51.5	36.4	29.4	19.6	38.7
Rutgers U	I	59.4	42.2	32.6	24.0	45.4
U Maryland	I	52.8	38.0	31.2	23.2	40.1
U Virginia	I	59.0	39.9	32.0	23.1	44.9
U DELAWARE	I	50.3	35.6	28.5	21.5	36.8
State Colleges						
Montclair State	IIA	47.8	38.7	31.3	24.5	38.8
Salisbury State	IIA	39.8	31.5	25.8	21.5	30.5
Towson State	IIA	41.9	35.4	28.3	22.2	32.9
Morgan State	IIA	45.6	35.9	30.7	24.6	35.0
Virginia State	IIA	37.5	32.7	29.5	24.4	31.8
UMD Eastern Shore	IIA		35.4	33.2	27.7	31.3
DELAWARE STATE	IIB	*	*	*	*	*
Community Colleges						
Cecil County CC	III	33.4	----	25.5	19.1	26.4
Community College of Philadelphia	III	*	*	*	*	*
WOR-WIC Tech. (MD)	III	----	30.0	26.2	22.6	26.6
Salem Community College	III	*	*	*	*	*
CC of Baltimore	III	35.2	29.2	25.6	21.4	27.6
Camden Co. Coll.	III	*	*	*	*	*
Mercer Co. CC	III	*	*	*	*	*
Delaware Co. CC	III	*	*	*	*	*
Chesapeake Co. (MD)	III	----	28.2	23.0	----	25.0
DTCC						
Southern	IV				30.8	30.8
Stanton/Wilm.	IV				28.8	28.8
Terry	IV				28.1	28.1

*Salaries for these colleges are not listed in the 1986-87 AAUP report. Evidently these institutions did not complete the AAUP form MEA22.

Table 23

National Average 9-Month Salaries,
By Rank and Institutional Category For
Public Institutions, 1986-87 (in thousands)

Category I	Avg. Public	University of Delaware
Prof.	48.7	50.3
Assoc.	35.6	35.6
Assist.	29.9	28.5
Inst.	21.4	21.5
All Ranks	38.7	36.8
Category IIB		**Delaware State College**
Prof.	36.9	*
Assoc.	31.2	*
Assist.	25.9	*
Inst.	21.6	*
All Ranks	29.7	*
Category III		**DE Tech. & Comm. Coll.**
Prof.	37.5	-
Assoc.	31.6	-
Assist.	26.9	-
Inst.	22.7	-
All Ranks	30.5	29.2
Category IV	31.4	29.2

*Salaries for these colleges are not listed in the 1986-87 AAUP report. Evidently these institutions did not complete the AAUP form MEA22.

Table 23 compares average 9-month salaries for all public institutions, by AAUP category, with salaries at the three Delaware institutions.

The average salary figures are subject to a number of factors, especially in a small institution. They do not necessarily reflect an official salary scale. Higher than normal longevity of current faculty in a certain rank, or heavy faculty turnover in a given year, for example, might distort the average for that particular rank.

STATE FUNDED STUDENT ASSISTANCE PROGRAMS

During the past eight years (FY81-FY88) State funding directed to student financial aid, in the form of scholarships and grants has increased 142% - from 2.4 million to 5.8 million. This increase outpaced increases in the CPI, increases in tuition at Delaware colleges, and increases in overall State funding per FTE. As impressive as this effort may seem, financial aid funding remains inadequate in meeting the financial need demonstrated by Delawareans. This is evidenced by the requests for an additional $1.8 million in financial aid for the next fiscal year. In comparisons with other states' efforts in this area, Delaware does not compare favorably, particularly in comparisons with other high-tuition states.

Because the State's $5.8 million financial aid appropriation makes up only a part of the $47 million scholarship, aid, and loan portfolio of the seven Delaware colleges, the significant state increases in financial aid funding have not been sufficient to make up for the double impact of tuition increases and federal cut-backs in financial aid. The eligibility of middle class families for federal assistance has been systematically reduced during the past few years and is being further reduced by new limitations on federally guaranteed loans.

In addition to issues related to overall financial aid funding, there are several policy questions which arise from the distribution pattern among institutions and agencies and among lines within institutional budgets. In 1969, the Academy for Educational Development, in a comprehensive study of higher education in Delaware, commented that the financial aid programs "resemble a patchwork quilt, consisting of a series of separate decisions made over the years to problems as they arose". In 1986 the Task Force to Study Higher Education in Delaware noted that "Delaware student financial aid programs may have become so specialized as to be incoherent in the aggregate". At that

time Delaware appropriated funding for 17 separate financial aid programs; today there are twenty-two.

At the end of 1986 the Governor requested that the Post-secondary Education Commission and the Council of Presidents of the State supported colleges review the State's student aid programs and prepare recommendations. The Commission with the consent of the Council, appointed an ad hoc committee of financial aid officers from all Delaware colleges to gather data for this purpose. The committee's report, in its final stages at this writing, will be available in the near future.

The Postsecondary Education Commission has consistently recommended that the State commit itself to a student-based distribution of financial aid by providing additional funds to the State's centralized grant program - the Delaware Postsecondary Scholarship Fund. The value of this recommendation is in having the additional funding available to all Delaware residents who need assistance, regardless of their college choice. Such a policy would preclude the need to guess about the relative need of Delaware students at one institution compared to another, and would distribute financial aid on the basis of individual student need rather than institutional budget priorities or political clout.

An historical perspective on the pattern of financial aid funding since 1972 and requests submitted for FY89 is presented on the following page, Table

Table 24

DELAWARE SCHOLARSHIP/FINANCIAL AID FUNDING SINCE 1972*

FY	1972	1975	1978	1981	1984	1985	1986	1987	1988	1989** Request
University of Delaware										
General Scholarships	273.0	909.0	1,024.0	1,024.0	1,024.0	1,024.0	1,024.0	1,224.0	1,224.0	1,324.0
Teacher Scholarships (Summer)	50.0	50.0	-	-	75.0	75.0	100.0	104.5	172.9	242.2
Scholarships	100.0	150.0	150.0	300.0	350.0	650.0	750.0	825.0	885.0	973.5
Aid to Needy Students	57.0	57.0	542.0	542.0	542.0	542.0	542.0	542.0	642.0	742.0
Academic Incentive Fund	-	-	-	50.0	50.0	100.0	100.0	100.0	100.0	100.0
Title VI - Scholarships	-	-	-	-	172.2	352.0	617.3	673.2	750.2	800.2
Student Employment Program	-	-	-	-	-	-	150.0	156.8	156.8	156.8
Carvel Scholarships	-	-	-	-	-	-	-	150.0	200.0	200.0
TOTAL UD	480.0	1,166.0	1,716.0	1,916.0	2,213.2	2,743.0	3,283.3	3,775.5	4,130.9	4,538.7
Delaware Technical & Community College										
Aid to Needy Students	-	25.0	25.0	44.0	48.3	64.2	112.2	112.2	137.2	180.2
Academic Incentive Funds	-	-	-	25.0	25.0	50.0	50.0	50.0	50.0	50.0
NDSL Match	-	-	-	-	-	68.0	4.5	4.5	7.5	7.5
TOTAL DTCC	-	25.0	25.0	69.0	73.3	182.2	166.7	166.7	194.7	237.7
Delaware State College										
Scholarships	50.0	50.0	56.0	56.0	56.0	76.0	86.0	86.0	86.0	86.0
Academic Incentive Funds	-	-	-	25.0	25.0	50.0	50.0	50.0	50.0	50.0
Title VI Scholarships	-	-	-	-	87.5	110.0	110.0	120.0	120.0	120.0
Athletic Grant	-	-	-	-	-	53.1	73.0	73.1	83.1	83.1
Teacher Scholarships (Summer)	-	-	-	-	18.0	36.0	36.0	36.0	36.0	36.0
Mishoe Scholarships	-	-	-	-	-	-	-	-	50.0	100.0
Grad. Fellowships	-	-	-	-	-	-	-	-	-	50.0
TOTAL DSC	50.0	50.0	56.0	81.0	186.5	325.1	355.0	365.1	425.1	525.1
Education Commission										
Scholarship Fund	150.0	150.0	350.0	350.0	375.2	570.0	637.0	706.5	711.3	1,911.3
Merit-Based Scholarships	-	-	-	-	-	200.0	200.0	200.0	200.0	200.0
Christa McAuliffe - Teacher	-	-	-	-	-	-	-	50.0	100.0	150.0
Nursing Incentive	-	-	-	-	-	-	-	-	50.0	100.0
TOTAL DPEC	150.0	150.0	350.0	350.0	375.2	770.0	837.0	956.5	1,061.3	2,361.3
STATE TOTAL	680.0	1,391.0	2,147.0	2,416.0	2,848.2	4,020.3	4,642.0	5,263.8	5,812.0	7,662.8

*Amounts do not include funds appropriated directly or indirectly as matching funds for the Federal College Work-Study Program.
**Amounts reflect highest budget level request.

STATE SUPPORT TO DELAWARE RESIDENTS WHO MUST PURCHASE THEIR EDUCATION IN OTHER STATES

The State of Delaware has for many years recognized the limitations imposed by its population size and financial resources in offering the variety of specialized higher education opportunities needed by its citizens. Action of the General Assembly in 1953 in creating the "Higher Education Scholarship" program is evidence of the State's long-standing concern in this regard. That program (now part of the broader Delaware Postsecondary Scholarship Fund) provides a source of financial assistance for students studying at colleges in programs not available at Delaware's tax-supported colleges.

In a similar (though more complex) vein, the Delaware Institute for Medical Education and Research (DIMER) was established in 1969. One part of this program guarantees medical education slots for qualified Delaware residents at Jefferson Medical College. Another part provides scholarship assistance to these students, and a third section provides funding for medical education programs of the Wilmington Medical Center and Health Sciences at the University of Delaware.

Following DIMER, two other programs were established to guarantee places for qualified Delaware residents in professional schools. The Delaware Institute for Veterinary Medical Education (DIVME) provides for the purchase of positions in the colleges of veterinary medicine at the University of Pennsylvania and at Cornell University. The Optometric Institutional Aid program is a contractual arrangement with the Pennsylvania College of Optometry to provide space for qualified Delaware students.

Finally, in 1980 the Delaware Institute of Dental Education and Research was created by the 130th General Assembly. The FY88 State Budget included funds to provide for payment of three dental internships. This program differs from the others described in this section, in that, to date, funding for education outside the State has not been established. Such funding, however, would be permissible under the program.

Table 25

Summary of State Support to Students Enrolled in Programs of Study Outside the State of Delaware

	FY79	FY80	FY81	FY82	FY83	FY84	FY85	FY86	FY87	FY88	FY89** Request
DIMER											
Contract Positions -	$800.0	$856.0	$950.0	$997.5	$1,047.4						
Scholarships	$ 50.0	$ 64.0	$100.0	$100.0	$ 105.0		$ 157.0	$ 157.0	$ 190.0		
Operations					$ 210.0						
TOTAL:	$850.0	$920.0	$1,050.0	$1,097.5	$1,362.4	$1,348.8	$1,488.4	$1,565.0	$1,643.0	$1,708.7	$1,785.6
Note: Students pay regular Jefferson tuition											
DIVME											
Contract Positions - Students repay 25% of contract costs and pay regular tuition	$ 36.0	$ 65.0	$ 105.0	$ 147.0	$ 164.0	$ 160.5	$ 155.0	$ 165.0	$ 148.0	$ 179.0	$ 160.0
DIDER											
Dental Intern Positions							$ 40.0	$ 86.7	$ 91.7	$ 93.5	$ 97.7
Optometric Institutional Aid											
Contract Positions - Students repay 25% of contract cost and are required to practice in Delaware. Tuition is reduced by the amount of the contract ($4,000)	$ 16.0	$ 12.0	$ 86.0	$ 28.0	$ 28.0	$ 28.0	$ 16.0	$ 24.0	$ 28.0	$ 20.0	$ 28.0
Other Out-Of-State Grants*											
Grants range from $200 to $800. Major categories of fields of study are: Architecture, Audiology, Dentistry, Forestry, Journalism, Law, Medicine, Pharmacy	$200.0	$144.0	$ 210.0	$ 280.0	$ 250.0	$ 184.6	$ 186.7	$ 188.1	$ 127.1	$ 153.8	$ 155.0

**Amounts reflect highest budget level request.

DELAWARE COLLEGE ENROLLMENT

Delaware's college headcount enrollment for the fall of 1987 reached an all-time high of 36,134 students. The headcount (total of full- and part-time students) for the fall of 1987 increased 2.9% from that of 1986. The 1986 headcount, in turn, represented a 2.6% increase over the fall of 1985.

Full-Time Equivalent (FTE) enrollment (calculated as full-time students plus one-third of part-time students) increased by 577 FTE or 2.2% from the previous year, reflecting an increase in both full- and part-time students.

The part-time student increase was larger than the full-time student increase (650 and 363 respectively), which increased the percentage of part-time students in the college population from 37.0% in 1986 to 38.6% in 1987.

The Commission has charted college enrollment figures over the past thirteen years, and has for the past eight years projected a no-growth situation. This year's increase, following the 1986 increase adds almost 2,000 students to the college population. This has occurred while the number of high school graduates in Delaware has declined. Whether the increase is the beginning of a long-range upward trend or a continuation of the up and down movement witnessed since 1975 remains to be seen.

Much of the headcount variation is accounted for by the part-time student count. Figure 3 depicts changes in part-time and full-time enrollment from 1980 to 1987.

Table 26

Headcount (full-time plus part-time) Enrollment
In Degree, Diploma & Certificate Programs for Delaware Colleges
Fall 1975 - Fall 1987

Fall of	UD	DSC	DTCC	DTCC-UD Parallel Program	Wesley	Goldey Beacom	Wilmington	Widener University Delaware Campus	Widener University Delaware Law School	Total
1975	19,080	2,174	6,269	*	Data collected for these years was aggregate data for "all independent colleges"					32,830
1976	19,035	2,167	5,501	*						31,505
1977	19,018	2,128	5,095	*						30,960
1978	18,795	2,129	5,523	*	1,127	1,460	767	1,120	742	31,663
1979	18,731	2,051	6,209	266	1,267	1,490	740	1,288	757	32,799
1980	18,841	2,083	6,679	309	1,316	1,662	782	1,299	764	33,735
1981	18,241	2,128	7,030	376	1,322	1,802	985	1,928	813	34,625
1982	18,231	2,151	7,164	384	1,194	1,863	877	1,579	864	34,307
1983	17,859	2,113	7,177	374	1,148	1,993	1,213	2,106	864	34,847
1984	17,714	2,209	7,001	369	1,172	1,918	1,060	1,936	885	34,564
1985	17,754	2,290	7,073	408	1,083	1,896	971	1,831	910	34,216
1986	18,203	2,327	7,508	428	1,044	1,840	1,227	1,612	932	35,121
1987	18,551	2,389	7,675	516	1,086	1,785	1,453	1,637	1,042	36,134
% of Total State Enrollment 1987	51.3%	6.6%	21.3%	1.4%	3.0%	5.0%	4.0%	7.4%		100%
% Change Enrollment 1986-87	1.9%	2.7%	2.2%	20.6%	+4.0%	-3.0%	18.4%	+5.3%		2.9%
% Change Enrollment 1975-87	-2.8%	9.9%	22.4%	94.6% (78-87)	1.6% (78-87)	22.3% (78-87)	89.4% (78-87)	+43.9%		10.1%

*Enrollment in the parallel program, a DTCC/UD joint venture, for these years was included in the UD figures.

Comparing headcount enrollment of 1980 to that of 1987 results in an increase of 2,399 students (7.1% increase). Ninety-seven percent (2,329 students) of that increase is accounted for in the part-time student count.

Full-time student enrollment has been relatively stable from 1980 to 1987. The increase in full-time students in 1987 compared to 1980 is 70 students (0.3%). The difference between the highest full-time enrollment (1987) and the lowest (1985) is roughly 4%.

The stability of the postsecondary enterprise in Delaware is further evidenced in the production of degrees (see following section) where the difference in degrees awarded between 1980 and 1987 is approximately 4%.

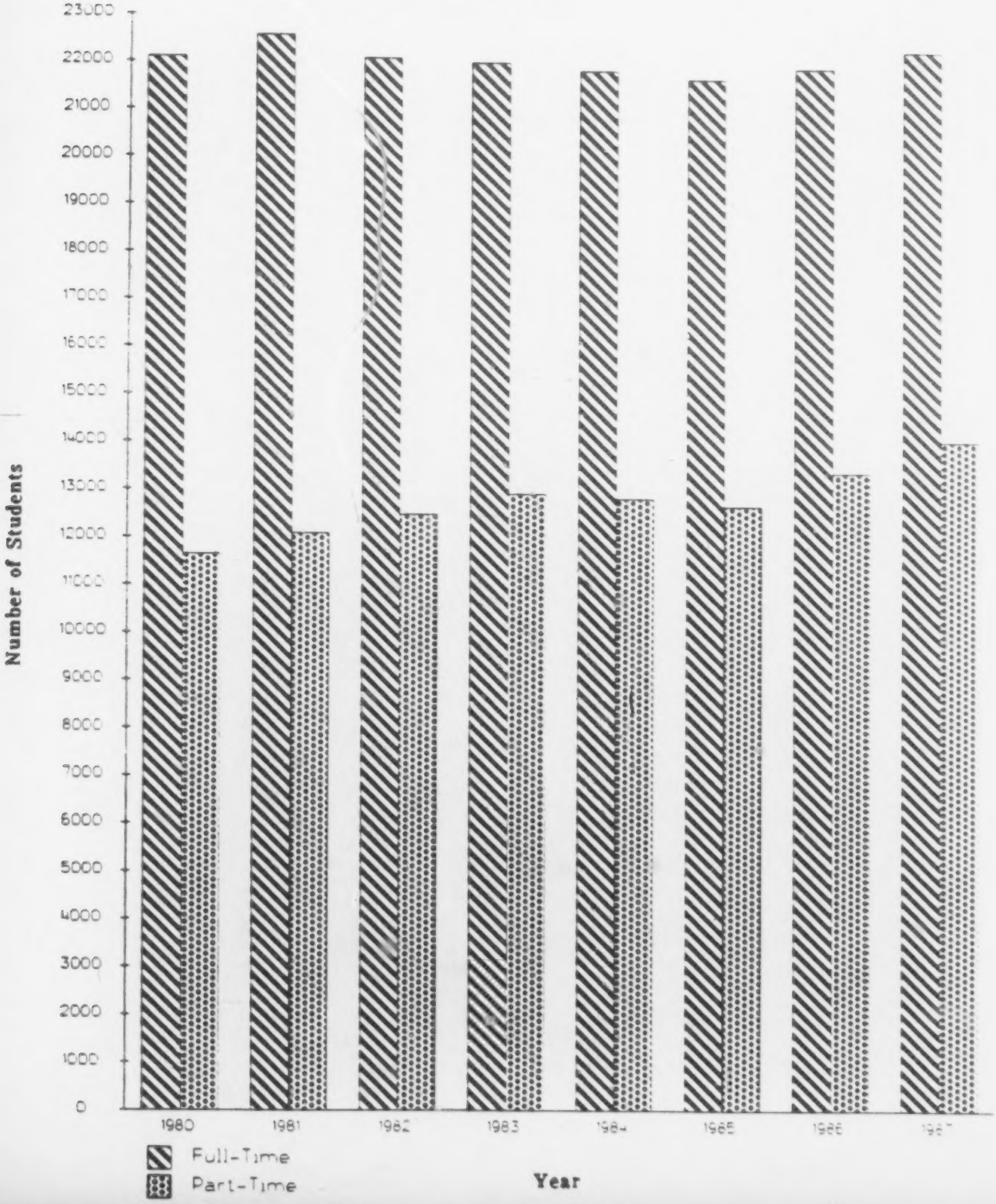
It is not surprising that we are not witnessing a surge of growth in the Delaware college population. The surprise is that the steep decline in the number of Delaware high school graduates has not been reflected in the college enrollment figures. The Commission has not kept trend data related to the age of college attenders in the state, but it would be reasonable to conclude that the average age of Delaware's college population has increased over the past several years.

Additionally, the proportion of out-of-state students has increased rather significantly over at least the past four years.

With the known direction of high school graduating classes over the next four years in Delaware and surrounding states, college enrollment stability will increasingly depend on institutions' ability to attract older students and students from outside of Delaware.

Figure 3

Full-Time & Part-Time Student Enrollment 1980-1987



HEADCOUNT ENROLLMENT

As indicated in Table 26 the UD/DTCC Parallel Program had the greatest percentage increase in enrollment from fall 1986 to fall 1987. Wilmington College was second with an 18.4% enrollment increase. The largest increase in numbers, however, occurred at the University of Delaware where 348 additional students were enrolled in 1987. Only one institution, Goldey Beacom College, reported an enrollment decrease.

The combined enrollment increase of the independent colleges was 5.2% (348 students). The combined increase of the public institutions was 2.3% (665 students). The public institutions enrolled 80.6% of Delaware's total headcount.

FULL AND PART-TIME ENROLLMENT

Full-time enrollment as percentage of total student headcount decreased slightly from 1986 to 1987. For the fall of 1986 full-time enrollment accounted for 62.0% of headcount, compared to 61.3% in fall of 1987. The percentage distribution of full-time and part-time students at each college is presented in Table 29.

The University of Delaware has the highest percentage of full-time students (76%). The University of Delaware is the only institution which shows a consistently rising percentage of full-time students since 1975.

At Delaware State College, Widener University (DE), Wesley College and the University of Delaware, full-time enrollment makes up at least half of the headcount. Wilmington College has the highest percentage of part-time students, at 74%. DTCC and DSC have shown a consistent trend in increasing the percentage of part-time students during the thirteen year period shown in Table 29, culminating in a 66% part-time share in 1987 for DTCC, and a 34% part-time share for DSC.

Table 27

Full-Time Equivalent* Enrollment at Delaware Colleges, Fall 1985-1987

Fall	1985	1986	1987
Delaware State College	1,851	1,777	1,851
University of Delaware	15,052	15,336	15,578
Parallel	382	379	436
DTCC			
Southern	1,076	1,087	1,168
Wilmington/Stanton	2,293	2,366	2,295
Terry	721	806	825
Total DTCC	4,090	4,259	4,288
Wesley	728	757	803
Goldey Beacom College	1,237	1,164	1,117
Wilmington College	498	668	736
Widener	1,965	1,898	2,006
TOTAL:	25,803	26,238	26,815

*Full-time equivalent (FTE) enrollment can be calculated in several different ways. Since there is no uniform FTE calculation used in the state, the Commission has consistently used the following rough calculation to arrive at full-time-equivalency for all colleges: (Full-time students) + (Part-time students ÷ 3) = FTE.

Table 28

Fall Enrollment 1987

By Full-Time/Part-Time, Graduate/Undergraduate Status and Sex

	Full-Time				Part-Time				Total
	Undergrad.		Graduate		Undergrad.		Graduate		
	Men	Women	Men	Women	Men	Women	Men	Women	
Delaware State College	694	850	9	29	187	365	78	177	2,389
University of Delaware	5,519	7,372	699	501	1,541	1,970	427	522	18,551
Parallel Program	200	196	-	-	47	73	-	-	516
DTCC Southern	288	499	-	-	431	713	-	-	1,931
Wilm/Stanton	671	652	-	-	1,191	1,726	-	-	4,240
Terry	204	282	-	-	448	570	-	-	1,504
DTCC Total	1,163	1,433	-	-	2,070	3,009	-	-	7,675
Wesley College	291	371	-	-	177	247	-	-	1,086
Goldey Beacom College	207	576	-	-	235	767	-	-	1,785
Wilmington College	163	146	49	25	270	419	226	155	1,453
Widener University, DE	383	621	426	239	226	407	235	142	2,679
TOTALS	8,620	11,565	1,183	794	4,753	7,257	966	996	36,134

Table 29

Percentage Full-Time (FT) and Part-Time (PT) Enrollment at Delaware Colleges

Fall 1975 - Fall 1987

Fall of	UD		DSC		DTCC		Wesley		Goldey Beacom		Wilmington		Widener DE Campus	
	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT
1975	68	32	80	20	52	48	-	-	-	-	-	-	-	-
1976	69	31	81	19	56	44	-	-	-	-	-	-	-	-
1977	71	29	78	22	52	48	-	-	-	-	-	-	-	-
1978	72	28	76	24	47	53	60	40	65	35	34	66	66	34
1979	73	27	76	24	48	52	51	49	54	46	40	60	68	32
1980	74	26	76	24	47	53	53	47	50	50	56	44	66	34
1981	75	25	76	24	46	54	47	53	41	59	47	53	67	33
1982	74	26	76	24	45	55	46	54	44	56	47	53	62	38
1983	75	25	74	26	46	54	46	54	49	51	25	75	50	50
1984	76	24	74	26	41	59	35	65	50	50	27	73	57	43
1985	77	23	71	29	37	63	51	49	48	52	27	73	57	43
1986	76	24	65	35	35	65	59	41	45	55	32	68	62	38
1987	76	24	66	34	34	66	61	39	44	56	26	74	62	38

MALE/FEMALE COMPOSITION

Women students outnumbered men in headcount enrollment in the fall of 1987 by 5,090. This was more than the 4,661 majority held by women in 1986, but the overall percentage of women remains at 57% of total headcount enrollment. Table 31 shows a trend since 1978 toward higher percentage participation by women. In contrast to the faster, consistent increase in women as a percentage of total headcount up to 1982, the past four years' data would indicate a leveling of that trend. Nationally the same trend has been occurring and most researchers feel that the current proportional representation of men and women will remain about the same over the next several years.

There is a difference in male/female composition between part-time and full-time student populations. Women constitute 55.8% of full-time enrollment and 59.1% of part-time enrollment. Table 30 shows the male/female composition of each college in the state. Goldey Beacom records the highest percentage of female students and Wilmington College the lowest.

FIRST-TIME FRESHMEN

Table 32 presents numbers of full- and part-time (combined) first-time freshmen. First-time freshmen are entering students who have not previously attended any college, and thus represent the new entrants into the college market. First-time freshmen enrollment may indicate future enrollment trends, and may be the most sensitive measure of the effects of changes in tuition, financial aid, or other economic variables. It is felt that, in combination, data on enrollment, first-time freshmen and degrees awarded can provide an overall perspective on enrollment pattern characteristics.

As indicated in Table 32 , the number of first-time freshmen decreased by 282 between 1986 and 1987, a 3.7% decrease from 1986. This decrease follows an 8.6% increase the previous year. The year to year fluctuations in first-time freshmen in Table 32 indicate no consistent trend.

Table 30

Men and Women Students as a Percentage of Total Headcount Enrollment, Fall 1987, by Institution

	Men	Women
University of Delaware	44.1%	55.9%
Delaware State College	40.5%	59.5%
Delaware Technical & Community College		
Southern	37.2%	62.8%
Terry	43.4%	56.6%
Wilmington/Stanton	43.9%	56.1%
Goldey Beacom College	24.8%	75.2%
Wesley College	43.1%	56.9%
Widener Univ., Delaware Campus	47.4%	52.6%
Wilmington College	48.7%	51.3%

Table 31

Men and Women Students as a Percentage of Total State Headcount, Fall 1978-1987

Year	Men	Women
1978	48%	52%
1979	46%	54%
1980	45%	55%
1981	44%	56%
1982	45%	55%
1983	45%	55%
1984	44%	56%
1985	44%	56%
1986	43%	57%
1987	43%	57%

Table 32

First-Time Freshmen (Headcount) Enrollment
(Full and Part-Time)
In Degree, Diploma & Certificate Programs
Fall 1980 - Fall 1987

	1980	1981	1982	1983	1984	1985	1986	1987
University of Delaware	3,358	3,170	3,466	3,173	3,666	3,349	3,495	3,486
Delaware State College	425	431	453	400	428	411	386	428
Delaware Technical & Community College								
Southern	925	746	506	466	495	558	558	519
Stanton/Wilmington	1,662	1,479	1,266	1,061	934	1,139	1,213	1,127
Terry	455	592	388	392	413	481	468	471
Wesley College	342	300	268	322	547	262	277	316
Goldey Beacom College	374	473	404	401	416	405	484	324
Widener University, Delaware Campus	537	877	525	918	744	507	446	374*
Wilmington College	201	201	171	172	68	64	141	141
TOTAL	8,279	8,269	7,447	7,305	7,711	7,176	7,468	7,186

*School of Hotel/Restaurant Management not included in 1987 count.

RESIDENCE OF FIRST-TIME FRESHMEN

Table 33 indicates the Fall 1986 residence status (Delaware or out-of-state) of first-time freshmen for Delaware colleges. The data do not include transfer students, unclassified students, or first-time graduate and law students.

The percentage and number of out-of-state students who were first-time freshmen at Delaware institutions increased rather significantly from 1981 to 1983 but remained reasonably stable from 1983 to 1986 with a small increase in number, but a decrease in percent of total.

First-time freshmen who are residents of Delaware are in the majority at three schools - Delaware Tech, Wilmington College and Goldey Beacom College. Out-of-state students are the majority of first-time freshmen at five of the seven Delaware colleges.

Table 33

Student Residence Data For First-Time Freshmen* Fall 1981, 1983 and 1986 (Headcount)**

		1981		1983		1986	
		Delaware	Non-Delaware	Delaware	Non-Delaware	Delaware	Non-Delaware
University of Delaware	No.	1,694	1,495	1,393	2,331	1,348	2,147
	%	53%	47%	37%	63%	38.6%	61.4%
Delaware State College	No.	234	213	248	182	158	228
	%	52%	48%	58%	42%	40.9%	59.1%
DTCC Southern	No.	616	130	434	56	500	58
	%	83%	17%	89%	11%	89.6%	10.4%
DTCC Terry	No.	454	6	395	7	457	11
	%	99%	1%	98%	2%	97.6%	2.4%
DTCC-Stanton/ Wilmington	No.	1,390	89	872	50	1,146	67
	%	94%	6%	95%	5%	94.5%	5.5%
Goldey Beacom College	No.	276	188	235	181	289	221
	%	60%	40%	56%	44%	56.7%	43.3%
Wesley College	No.	79	221	338	205	94	183
	%	26%	74%	62%	38%	33.9%	66.1%
Widener University Delaware Campus	No.					124	322
	%					27.8%	72.2%
Wilmington College	No.	268	65	96	15	394	47
	%	80%	20%	86%	14%	89.3%	10.7%
TOTAL	No.	5,011	2,407	4,061	3,260	4,510	3,284
	%	68%	32%	55%	45%	57.9%	42.1%

*Does not include first-time graduate students or law students.
**Residence data is collected biannually. Fall 1986 data is the latest available.

Table 34 lists the percentage of Delaware college first-time, out-of-state freshmen who are residents of selected states. Only those states from which 25 or more students come are listed.

In 1986 out-of-state, first-time freshmen at Delaware institutions represent 33 states, the District of Columbia, and foreign countries. While their number over the six year period increased by approximately 36%, the distribution of "feeder" states has remained relatively stable. New Jersey, Pennsylvania, Maryland and New York, in that order, account for approximately 93% of all out-of-state freshmen.

Table 34

Percentage of 1981 and 1986 Out-of-State First-Time Freshmen at Delaware Colleges From Selected States

	1981	1986
Pennsylvania	29.2%	30.5%
Maryland	21.7%	19.1%
New Jersey	33.2%	35.7%
Virginia	1.2%	1.1%
New York	6.1%	7.9%
Connecticut		1.3%
Other	8.6%	4.4%
	100.0%	100.0%

Racial Composition

White students constituted 84.3% of the higher education headcount in Delaware in the fall of 1986. Black students accounted for 10.9% and the Hispanic category made up 1.2%. Others, including non-resident aliens, American Indians, Alaskan Natives and Asian or Pacific Islanders, made up the remaining 3.5%.

Table 35

White, Black, and Other* Students
As a Percentage of Total Fall 1986 Headcount Enrollment**

	White	Black	Hispanic	Other
University of Delaware	91.6%	3.8%	0.2%	4.4%
Delaware State College	43.0%	53.8%	1.2%	2.0%
DelawareTechnical & Community College				
Southern	82.9%	14.9%	0.4%	1.8%
Terry	83.8%	12.4%	1.7%	2.1%
Wilmington/ Stanton	83.5%	11.9%	1.8%	2.8%
Wesley College	86.1%	10.8%	1.0%	2.1%
Goldey Beacom College	84.1%	11.0%	1.2%	3.7%
Wilmington College	75.6%	19.8%	2.7%	1.9%

*Other, as used here includes the following: Non-resident alien, American Indian or Alaskan Native, Asian or Pacific Islander.
**Racial data is collected biannually. Fall 1986 data is the latest available.

Table 36

Percentage White, Black, Hispanic and Other* Students
In Delaware Full-Time and Part-Time
Postsecondary Student Population Fall 1986**

	White	Black	Hispanic	Other	
Part-Time	84.0%	11.1%	1.7%	3.1%	100%
Full-Time	84.5%	10.8%	0.8%	3.7%	100%
Total	84.3%	10.9%	1.2%	3.5%	100%

*Other, as used here.
**Widener University data not included.

The difference in racial composition between the full- and part-time student populations is small. As shown in Table 36 the percentage of Blacks and Hispanics is slightly higher in the part-time population and the percentage of Whites and others is slightly higher in the full-time population.

Percentages of the four racial categories for individual colleges are presented in Table 35 . Delaware State College has the highest percentage of Black student enrollment (53.8%) and the University of Delaware has the lowest (3.8%).

Table 37

Average Age of Full-Time and Part-Time
Degree Seeking Undergraduate Students by College

	Full-Time	Part-Time
Delaware State College	21.9	30.5
University of Delaware	20.0	26.8
DTCC, Southern	26.4	31.2
DTCC, Wilmington/Stanton	23.4	29.5
DTCC, Terry	25.8	31.2
Goldey Beacom College	23.5	24.1
Wesley College	20.1	33.2
Wilmington College	26.7	32.8
Widener University, DE	19.7	32.4
State Average	21.0	29.6

Age of Undergraduates

Table 37 lists the average (mean) age of degree seeking undergraduates enrolled at Delaware colleges in the fall of 1987. The overall average of full-time undergraduates was 21 years. Part-time undergraduates' ages averaged to 29.6 years.

This is the first year that uniformly structured data on age of students has been collected, and thus trends related to age are not available.

DEGREES AND OTHER FORMAL AWARDS CONFERRED BY DELAWARE COLLEGES 1980 to 1987

While institutions of higher education have missions somewhat broader than degree production, a primary measure of institutional productivity and character is the number and level of degrees awarded.

Community or public service and research activities are two other measures of varying importance to institutions depending on their perceived or stated mission. Another area of growing importance is continuing education activity that is, in some cases, not aimed at degree production.

Conferring of formal recognition for the students' completion of an integrated course of study, however, must be considered a major aspect of each college's mission. Trends in the level of this major activity provide perspective on the health and direction of colleges and the direction of student choices as well as the health and direction of the state's human resource pool.

The Tables contained herein summarize total award data for past years: awards by level, by college, by major field, by sex and by race.

Awards, including certificates and diplomas, associate degrees, bachelor's degrees, master's degrees, first professional degrees, and doctorates, are documented for each year since 1980. Awards for each year include all awards granted between July 1 of the previous year and June 30 of the year listed. The University of Delaware is the only institution which awards the Ph.D. and the Delaware Law School is the only institution awarding the first professional degree, the JD, in Law.

The data utilized have been provided by each institution as part of the Integrated Postsecondary Education Data System (IPEDS), collected in the fall of each year. Criteria for degree and major area of study categories follow IPEDS guidelines.

The listing of majors (Table 48) is not exhaustive. It contains only those IPEDS categories under which awards were listed by the Delaware colleges. There is, for example, no listing for pharmacy or for architecture or Chinese language.

IPEDS degree categories were expanded for the 1983 report and some titles were deleted. Data for preceding years were placed in the most appropriate new categories.

In the new taxonomy each subject area is followed by categories of related technologies. These technologies are separately listed in Table 48, but are grouped into major fields in Tables 41, 42, 43, 44, 45, 46 and 47. For example, the field of "Engineering" includes graduates of the four year engineering programs as well as the two year "electronics technology" programs.

It is the Commission's hope that the data included herein will be of great interest to the colleges and to state and private sector planning organizations.

Table 38 lists the combined awards granted by all Delaware colleges from 1980 to 1987. The total number of awards decreased 1.4% from 1985 to 1986, and 2.0% from 1986 to 1987.

The 6002 awards of 1984 represent a high point in the eight year trend. The number of awards granted in 1987 is 7% lower.

There is no apparent long-term increasing or decreasing trend in total awards or in the various award levels over the eight year period. Table 38 generally reflects stability in degree production for Delaware.

Table 38

Total Awards Granted by Delaware Colleges
by Award Level by Year

	1980	1981	1982	1983	1984	1985	1986	1987
Diplomas, Certificates other Formal Awards	166	151	142	265	310	311	298	272
Associate Degrees	1,192	1,256	1,366	1,380	1,333	1,303	1,181	1,153
Bachelor's Degrees	3,265	3,194	3,231	3,328	3,401	3,264	3,322	3,242
Master's Degrees	468	452	516	518	613	552	567	586
1st Professional Degrees (Law)	211	221	221	222	238	265	261	245
Doctors Degrees	70	58	105	58	107	93	78	96
Total Awards	5,372	5,332	5,581	5,771	6,002	5,788	5,707	5,594

Table 39 lists degrees by level for each Delaware college campus. As with the State-wide picture there are few general trends that can be noted with regard to the individual colleges' degree data.

Table 39

Degrees and Other Formal Awards
Conferred by Colleges

College	1980	1981	1982	1983	1984	1985	1986	1987
DTCC - Southern								
Diplomas/Certificates	69	57	55	166	208	201	183	162
Associates Degrees	164	161	198	171	195	161	205	178
Bachelors Degrees	-	-	-	-	-	-	-	-
Masters Degrees	-	-	-	-	-	-	-	-
Doctoral Degrees	-	-	-	-	-	-	-	-
Total Awards:	233	218	253	337	403	362	388	340
DTCC - Stanton/Wilmington								
Diplomas/Certificates	25	19	33	31	37	26	33	32
Associates Degrees	321	391	431	423	449	445	391	398
Bachelors Degrees	-	-	-	-	-	-	-	-
Masters Degrees	-	-	-	-	-	-	-	-
Doctoral Degrees	-	-	-	-	-	-	-	-
Total awards:	346	410	464	454	486	471	424	430
DTCC - Terry								
Diplomas/Certificates	27	25	23	31	39	26	44	44
Associates Degrees	82	80	128	105	109	100	76	109
Bachelors Degrees	-	-	-	-	-	-	-	-
Masters Degrees	-	-	-	-	-	-	-	-
Doctoral Degrees	-	-	-	-	-	-	-	-
Total Awards:	109	105	151	136	148	126	120	153
Goldey Beacom College								
Diplomas/Certificates	35	48	29	37	24	54	37	34
Associates Degrees	179	206	158	170	191	163	198	180
Bachelors Degrees	61	83	75	92	97	99	109	115
Masters Degrees	-	-	-	-	-	-	-	-
Doctoral Degrees	-	-	-	-	-	-	-	-
Total Awards:	275	337	262	299	312	316	344	329

Table 39 (Continued)

College	1980	1981	1982	1983	1984	1985	1986	1987
Wesley College								
Diplomas/Certificates	10	2	2	-	2	4	1	-
Associates Degrees	141	132	138	136	129	106	95	104
Bachelors Degrees	24	39	37	37	35	55	40	49
Masters Degrees	-	-	-	-	-	-	-	-
Doctoral Degrees	-	-	-	-	-	-	-	-
Total Awards:	175	173	177	173	166	165	136	153
Delaware State College								
Diplomas/Certificates	-	-	-	-	-	-	-	-
Associates Degrees	-	-	-	-	-	-	-	-
Bachelors Degrees	232	241	275	253	219	224	235	259
Masters Degrees	-	-	-	3	24	21	40	36
Doctoral Degrees	-	-	-	-	-	-	-	-
Total Awards:	232	241	275	256	243	245	275	295
Wilmington College								
Diplomas/Certificates	-	-	-	-	-	-	-	-
Associates Degrees	4	7	5	6	6	5	1	7
Bachelors Degrees	196	166	154	168	163	188	167	141
Masters Degrees	16	20	28	43	58	89	113	108
Doctoral Degrees	-	-	-	-	-	-	-	-
Total Awards:	216	193	187	217	227	282	281	256
Widener University - Delaware Campus								
Diplomas/Certificates	-	-	-	-	-	-	-	-
Associates Degrees	248	237	266	317	227	298	196	161
Bachelors Degrees	-	-	7	47	65	127	143	49*
Masters Degrees	-	-	8	23	40	**	-	
Doctoral Degrees (JD's)	211	221	221	222	238	265	261	245
Total Awards:	459	458	502	609	570	690	600	455
University of Delaware								
Diplomas/Certificates	-	-	-	-	-	-	-	-
Associates Degrees	53	42	43	52	27	25	19	14
Bachelors Degrees	2,752	2,665	2,683	2,731	2,822	2,571	2,628	2,639
Masters Degrees	452	432	480	449	491	442	414	442
Doctoral Degrees	70	58	105	58	107	93	78	96
Total Awards:	3,327	3,197	3,311	3,290	3,447	3,131	3,139	3,191

*School of Hotel, Restaurant Management reported through PA campus.
**All Masters (MBA's) awarded through School of Management, PA campus.

Table 40

1983 - 1986 Awards
To Women By Award Level

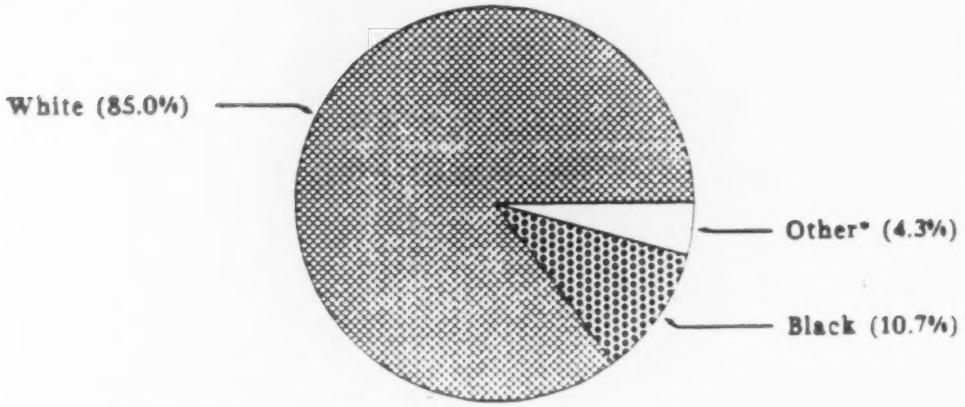
	1983	1984	1985	1986	1987
Total Awards:	57.0%	56.3%	56.5%	54.8%	58.9%
Diplomas/Certificates	63.0%	60.0%	62.4%	63.1%	58.1%
Associates Degrees	66.8%	63.8%	64.8%	67.6%	68.0%
Bachelors Degrees	56.6%	57.2%	57.0%	56.0%	59.4%
Masters Degrees	49.0%	48.3%	49.0%	48.1%	53.9%
1st Professional Degrees	18.9%	31.1%	29.4%	32.2%	35.5%
Doctoral Degrees	36.2%	29.0%	31.2%	30.8%	27.0%

Table 40 lists the percentage of awards at each level made to women from 1983 through 1987. Women earned 58.9% of all awards in 1987. This is a favorable representation given the fact that women comprise 57% of current higher education enrollment.

While women are heavily represented in the associate degree category, they are somewhat underrepresented at the doctoral and first professional levels.

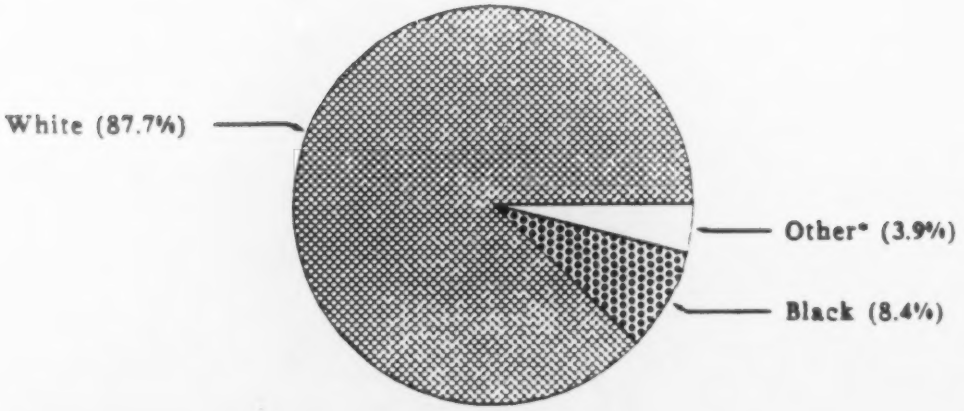
Figure 4

Enrollment by Race, Fall 1986



Note: No Widener data included

Degrees Awarded by Race, Spring 1987



*"Other" includes Non-Resident Aliens, American Indians or Alaskan Natives, Asians or Pacific Islanders, and Hispanics.

Table 41 provides a display of the percentage of total awards granted in each of twenty-seven disciplines during a nine year period. Those disciplines that have increased by more than two percentage points from 1978 to 1987 in terms of percentage of total awards in the State are: computer and information sciences, business and marketing, and health. Fields that have decreased in representation by more than two percentage points are education and liberal/general studies.

Table 42 provides a display percentage of awards in the twenty-seven disciplines made to women and men in 1987. Notations in the table indicate fields where the percentage of awards is ten percentage points lower or higher than representation in total degrees granted.

In a similar fashion Table 43 presents the award distribution for three racial groupings.

Table 44 lists the ten fields of study with the highest percentage of awards in 1978 and the fields with the highest percentage in 1987. Table 44 data include all degree levels. Tables 45, 46 and 47 present in the same format the top ten fields of study for associate degree recipients, bachelor's and master's degree recipients, respectively.

Table 48 provides a six-year display of awards in specific categories within the twenty-seven major degree field headings, and total numbers of awards in each field.

Table 41

Percentage of Total Awards*
Granted In Each Of Twenty-Seven Disciplines

Disciplines	1978	1980	1982	1984	1985	1986	1987
Agriculture	3.5	3.4	3.2	2.8	2.6	2.6	2.4
Business & Marketing	26.2	25.7	27.5	27.5	24.9	28.5	28.8(+)
Communications	1.4	2.6	2.2	2.1	2.2	2.4	2.2
Computer & Info. Science	1.0	1.2	2.4	3.2	3.2	3.5	3.1(+)
Education	11.1	9.5	7.1	7.1	6.7	6.9	7.0(-)
Engineering	7.9	9.1	10.1	10.0	10.6	9.9	9.4
Foreign Language	0.6	0.6	0.7	0.4	0.5	0.5	.5
Health	7.3	8.5	9.8	9.8	11.4	9.7	10.1(+)
Home Economics	2.9	3.6	3.6	4.0	3.5	3.7	3.5
Law	4.5	5.0	4.3	4.2	5.3	4.8	4.7
Letters	1.1	1.5	1.5	1.5	1.7	1.7	2.3
Liberal/General Studies	5.7	3.8	1.5	0.6	0.2	0.8	.8(-)
Library Sciences	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Life Sciences	3.6	2.6	2.0	2.7	2.7	2.5	2.8
Mathematics	0.8	0.8	0.4	0.5	1.0	1.0	.9
Multi-Interdisciplinary Studies**	1.5	0.9	0.6	1.3	2.0	1.0	.5
Parks & Recreation	0.0	0.0	0.1	0.2	0.2	0.2	.1
Philosophy & Religion	0.2	0.0	0.2	0.1	0.2	0.2	.1
Physical Science	2.5	2.6	2.7	3.3	3.3	2.8	2.4
Psychology	2.8	2.6	2.8	3.1	3.3	2.6	3.4
Protective Services	2.9	2.0	1.4	1.4	1.3	1.6	1.3
Public Affairs	1.4	1.1	2.2	0.5	0.6	0.7	.8
Social Sciences	9.2	10.1	10.7	9.7	9.3	8.6	9.3
Mechanics & Repairers	0.0	0.0	0.0	0.2	0.6	0.4	.5
Transportation & Material Moving	0.0	0.0	0.0	1.7	1.5	1.6	1.3
Construction Trades	0.0	0.0	0.0	0.1	0.1	0.0	0.0
Visual & Performing Arts	1.9	2.8	2.1	2.1	1.7	1.8	1.8
TOTALS	100%	100%	100%	100%	100%	100%	100%

(-) denotes loss of two or more percentage points from 1978 to 1987.
(+) denotes gain of two or more percentage points from 1978 to 1987.
* "Awards" include all undergraduate and graduate degrees, and certificates or diplomas. Specific numbers of awards for each field are contained in Table 48.
** Includes Area & Ethnic studies.

Table 42

Number and Percentage of
Awards By Field of Study by Sex, 1987

Disciplines	Men		Women	
	N	%	N	%
Agriculture	76	(56.3)+	59	(43.7)-
Business & Marketing	579	(35.9)	1032	(64.1)
Communications	35	(28.0)-	90	(72.0)+
Computer & Info. Science	86	(50.3)	85	(49.7)
Education	73	(18.7)-	317	(81.3)+
Engineering	429	(81.9)+	94	(17.9)-
Foreign Language	5	(18.5)-	22	(81.5)+
Health	29	(5.1)-	538	(94.9)+
Home Economics	22	(11.1)	176	(88.9)+
Law	158	(60.3)+	104	(39.7)-
Letters	53	(40.5)	78	(59.5)
Liberal/General Studies	10	(21.7)-	36	(78.3)+
Library Sciences	0	(0)	0	(0)
Life Sciences	75	(47.5)	83	(52.5)
Mathematics	32	(66.7)+	16	(33.3)-
Multi-Interdisciplinary Studies*	18	(62.0)+	11	(37.9)-
Parks & Recreation	8	(100.0)+	0	(0)
Philosophy & Religion	3	(50.0)	3	(50.0)
Physical Science	87	(65.4)+	46	(34.6)-
Psychology	59	(31.2)	130	(68.8)
Protective Services	46	(65.7)+	24	(34.3)-
Public Affairs	12	(27.9)	31	(72.1)+
Social Sciences	280	(53.7)+	241	(46.3)-
Mechanics & Repairers	27	(100.0)+	0	(0)
Transportation & Material Moving	69	(95.8)+	3	(4.2)-
Construction Trades	1	(100.0)+	0	(0)
Visual & Performing Arts	30	(29.4)-	72	(70.6)+
Totals:	2302	(41.2)	3291	(58.8)

*"Awards" include all undergraduate and graduate degrees, and certificates or diplomas.
**"Other" includes Non-Resident Aliens, American Indians or Alaskan Natives, Asians or Pacific Islanders, and Hispanics.
***Includes Area and Ethnic Studies

Table 43

Number and Percentage of
Awards*By Fields of Study By Race, 1987

Field of Study	Black		White		Other**	
	N	%	N	%	N	%
Agriculture	10	(7.4)	116	(85.9)	9	(6.7)
Business & Marketing	196	(12.2)	1361	(84.5)	54	(3.3)
Communications	8	(6.4)	114	(91.2)	3	(2.4)
Computer & Info. Science	5	(2.9)	148	(86.6)	18	(10.5)
Education	23	(5.9)	363	(93.1)	4	(1.0)
Engineering	20	(3.8)	459	(87.6)	45	(8.6)
Foreign Language	2	(7.4)	23	(85.1)	2	(7.4)
Health	41	(7.2)	510	(89.9)	16	(2.8)
Home Economics	6	(3.0)	189	(95.5)	3	(1.5)
Law	4	(1.5)	253	(96.6)	5	(1.9)
Letters	4	(3.0)	123	(93.8)	4	(3.0)
Liberal/General Studies	4	(8.6)	42	(91.2)	0	(0)
Life Sciences	8	(4.9)	139	(87.9)	11	(6.9)
Mathematics	14	(29.2)+	31	(64.6)-	4	(8.3)
Multi-Interdisciplinary Studies***	0	(0)	25	(86.2)	4	(13.8)
Parks & Recreation	0	(0)	8	(100.0)+	0	(0)
Philosophy & Religion		(0)	5	(83.3)	1	(16.6)-
Physical Science	8	(6.0)	119	(89.5)	6	(4.5)
Psychology	21	(11.1)	163	(86.2)	5	(2.7)
Protective Services	9	(12.8)	59	(84.2)	2	(2.8)
Public Affairs	7	(16.2)	34	(79.0)	2	(4.6)
Social Sciences	29	(5.4)	470	(90.1)	22	(4.1)
Mechanics & Repairers	8	(29.6)+	19	(70.3)-	0	(0)
Transportation & Material Moving	37	(51.4)+	35	(48.6)-	0	(0)
Construction Trades	0	(0)	1	(100.0)+	0	(0)
Visual & Performing Arts	4	(3.9)	95	(93.1)	3	(2.9)
Totals:	468	(8.4)	4903	(87.7)	222	(3.9)

*"Awards" include all undergraduate and graduate degrees, and certificates or diplomas.
**"Other" includes Non-Resident Aliens, American Indians or Alaskan Natives, Asians or Pacific Islanders, and Hispanics.
***Includes Area and Ethnic Studies

Table 44

Ten Fields of Study With Highest Percentage of Awards for 1978 and 1987

	1978		1987	
Rank	Field	% Of Total Awards	Field	% Of Total Awards
1	Business	26.6	Business	28.79
2	Education	11.3	Health	10.13
3	Social Sciences	9.3	Engineering	9.36
4	Engineering	8.1	Social Sciences	9.31
5	Health	7.4	Education	6.97
6	Liberal/General Studies	5.8	Law	4.68
7	Law	4.5	Home Economics	3.53
8	Life Sciences	3.6	Psychology	3.37
9	Agriculture	3.5	Computer/Info. Sciences	3.05
10	Protective Services	3.0	Life Sciences	2.82

Table 45

Ten Fields of Study With Highest
Percentage of ASSOCIATE Degrees Awarded in 1978 and 1987

	1978		1987	
Rank	Field	% Of Total Awards	Field	% Of Total Awards
1	Business	49.3	Business & Marketing	40.84
2	Liberal/General Studies	18.3	Health	20.29
3	Engineering	9.0	Engineering	18.21
4	Health	8.2	Computer/Info. Sciences	6.59
5	Protective Services	6.8	Protective Services	4.42
6	Public Affairs	4.5	Liberal/General Studies	3.29
7	Computer/Info. Sciences	1.7	Law	1.47
8	Law	1.5	Life Sciences	.78
9	Communications	0.4	Psychology	.78
10	Home Economics	0.3	Social Sciences	.69

While the largest percentage of associate degrees was awarded in the field of business in both 1978 and 1987, the actual number of degrees awarded in business decreased from 771 to 471 between 1978 and 1987. The decrease in number of degrees in this primary associate degree field is only partly a reflection of the overall drop (31%) in the number of associate degrees awarded in the State between 1978 (1,663) and 1987 (1,153). During this same period business related associate degrees dropped by 39%. Part of the decline is likely related to gains in other fields. Programs related to engineering and health (mainly nursing) more than doubled between 1978 and 1987, while two year liberal arts degrees numbering 286 in 1978 plummeted to 38 in 1987.

Table 46

Ten Fields of Study With Highest
Percentage of BACHELOR'S Degrees Awarded in 1978 and 1987

	1978		1987	
Rank	Field	% Of Total Awards	Field	% Of Total Awards
1	Business	19.2	Business	27.57
2	Social Science	14.7	Social Science	14.37
3	Education	13.6	Education	7.98
4	Engineering	7.7	Health	7.49
5	Health	6.4	Engineering	7.15
6	Agriculture	5.6	Home Economics	5.73
7	Life Sciences	4.8	Psychology	4.99
8	Home Economics	4.8	Life Sciences	4.16
9	Psychology	4.6	Letters	3.14
10	Physical Science	3.1	Physical Science	3.05

Of all associate degrees awarded in 1987, seventy-nine percent are in the fields of business, health and engineering. This compares to 66% concentrated in these fields in 1978. Computer and information sciences, the fourth largest area in 1987, represented only 1.7% of associate degrees in 1978, but 6.6% of all associate degrees in 1987.

Bachelor's degrees in business conferred in 1987 by Delaware colleges totaled 894, a 6.6% decrease from the 1986 number. Degrees in the field of business now constitute over one quarter of all bachelor's degrees conferred in the State.

A 43% drop in the number of degrees in education was recorded from 1978 (406 degrees) to 1983 (219 degrees). In 1987, the number of bachelor's degrees in education is 18% higher (259) than the 1983 low. Engineering degrees conferred at the bachelor's

Table 47

Ten Fields of Study With Highest Percentage of MASTER'S Degrees Awarded in 1978 and 1987

	1978		1987	
Rank	Field	% Of Total Awards	Field	% Of Total Awards
1	Education	42.6	Business	26.45
2	Social Sciences	10.3	Education	19.79
3	Life Sciences	8.2	Engineering	7.67
4	Business	7.8	Social Sciences	6.48
5	Engineering	7.6	Public Affairs	6.14
6	Physical Sciences	5.7	Health	4.60
7	Agriculture	4.0	Visual & Performing Arts	4.26
8	Visual & Performing Arts	3.6	Agriculture	3.92
9	Home Economics	2.1	Computer & Info. Sciences & Letters	3.75
10	Psychology	1.7		

level increased from 230 in 1978 to 288 in 1984. In 1987, 232 bachelor's degrees were awarded in engineering, moving that field from third to fifth in the ranking.

Agriculture, the major of 5.6% of bachelor degree recipients in 1978, decreased to 3% of bachelors degrees in 1987. Agriculture is no longer one of the top ten fields of study at the Baccalaureate level.

The decrease in master's degrees awarded in education between 1978 and 1987 was from 203 degrees to 116, a decrease of 43%. Coupled with an increase of about 307% in master's degree production in business (from 38 to 155 degrees), the percentage mix of master's degrees has been dramatically altered. At the same

time, degrees in health (nursing) and public affairs increased substantially, while social sciences and physical sciences declined as a percentage of degrees awarded.

Because the number of doctoral degrees awarded in the State is so small, an analysis of degree field percentages was not included since year-to-year fluctuations would be somewhat meaningless and misleading. The four leading areas of doctoral awards for 1987 were physical science (16 degrees), engineering (25 degrees), social sciences (9 degrees), and education (7 degrees). In addition, 245 Doctoral degrees (JD) in Law were awarded by the Delaware Law School.

Table 48

Discipline Specialty (Major field of study)	Diploma, Certificate Other Recognition						Associate Degrees						Bachelor's Degrees						Master's Degrees						Doctor's Degrees					
AGRIBUSINESS & PRODUCTION	82	83	84	85	86	87	82	83	84	85	86	87	82	83	84	85	86	87	82	83	84	85	86	87	82	83	84	85	86	87
Agri.Business & Mgmt.,gen'l								6					34	27	10	21	26	30												
Agri. Economics													14	10	13	10	9	8	2	3	6	4	1	5						
Agri. Business									5	6	7	3	1			5	3													
Agri., Other*							10				7																			
AGRICULTURAL SCIENCES																														
Agri. Sciences, gen'l								3	1	2				13	14	7	8	9												
Animal Sciences, gen'l								3		1			45	52	43	34	38	37	7	9	5	9	1	9			2		2	1
Agronomy								2					48	42			1		7	6			6		1					
Plant Sciences, gen'l									1	1			4	1	29	33	25	13			9	4	8	6					1	1
Poultry								3	6	3	1	4																		
Ornamental Horticulture																		1	4	2	4		4	8						
Soil Sciences																														
RENEWABLE NATURAL RESOURCES																														
Renewable Nat. Res., gen'l									1				6	3	4															
Wildlife Mgmt.																														
Fisheries																1	2													
AREA ETHNIC STUDIES																														
American Studies														4	8	7	5	1			7	9	6	8						

AGRICULTURE	1982	1983	1984	1985	1986	1987
Total Awards:	178	185	168	141	149	135

AREA & ETHNIC STUDIES	1982	1983	1984	1985	1986	1987
	-	4	15	16	11	9

Table 48 (Continued)

Discipline Specialty (Major field of study)	Diploma, Certificate Other Recognition						Associate Degrees						Bachelor's Degrees						Master's Degrees						Doctor's Degrees					
	82	83	84	85	86	87	82	83	84	85	86	87	82	83	84	85	86	87	82	83	84	85	86	87	82	83	84	85	86	87
BUSINESS & MANAGEMENT																														
Business & Management, gen'l	5	1	5	4	4	7	104	88	22	49	77	39		55	30	59	42	35	51	34		13	39							
Accounting					2		83	96	59	53	59	84	266	241	250	242	260	201	2	6	6	10	3	4						
Banking & Finance								2					100	112	129	147	151	149												
Bus. Adm. & Mgmt., gen'l					1		4	63	103	80	65	72	281	213	124	117	123	204	36	63	85	112	103	90						
Business Economics																					58									
Hotel/Motel Mgmt.							16	37	24	28	10	2		28	35	90	107													
Transportation Mgmt.								2	5	3	1	2																		
Operations Research																	27	22	3	1		3		1	1			1		1
Marketing Mgmt.							54	22	20	19	15	25	162	123	145	132	209	218												
Aviation Mgmt.													5	12	16	10	11													
Taxation																				3										
Product Mgmt.									1						44	44														
Mgmt. Info Systems										4	6	2				4	8	25												
Business, Other						1						1						7						60						
BUSINESS & OFFICE																														
Accounting & Computing					1			1	2	8	15	1		1	5	5	12													
Secretarial & Related, gen'l*	67				1	2	207	10					4	6	1		1													
Executive Secretarial								104	86	60	72	71																		
Stenographic		42	28	40	25	18																								
Word Processing		20	24	38	48			4	5	16	26																			
(CONTINUED NEXT PAGE)																														

*Note - Previous reporting category "Secretarial Studies" included all levels of secretarial preparation. Data for 1979-1985 are thus included in the Secretarial and Related, general category.

Table 48 (Continued)

Discipline Specialty (Major field of study)	Diploma, Certificate Other Recognition						Associate Degrees						Bachelor's Degrees						Master's Degrees						Doctor's Degrees					
BUSINESS & OFFICE (Cont'd)	82	83	84	85	86	87	82	83	84	85	86	87	82	83	84	85	86	87	82	83	84	85	86	87	82	83	84	85	86	87
Clerk Typist		11		6	19	17																								
Typing, gen'l office related*		13	3	6	3	20		4	1	3	3	22																		
Business Data Entry		3		2	1	14				4		16																		
Acctg., Bookkeeping & Related				1	3	1				9																				
Machine Billing & Computing										1																				
Office Supv. & Mgmt.											25	10					6	11												
Legal Secretarial										25	21	14																		
Medical Secretarial					6	9				21	16	17																		
Credit Collection				19																										
Business Data Processing											1	5																		
MARKETING & DISTRIBUTION																														
Fashion Merchandising										74	36	42				15		20												
Tourism/Travel										39	22	23																		
General Mktg., other									7	4	2	4						4												
Retailing											1																			

BUSINESS	1982	1983	1984	1985	1986	1987
Total Awards:	1530	1606	1545	1484	1443	1520

MARKETING & DISTRIBUTION	1982	1983	1984	1985	1986	1987
Total Awards:	79	127	99	132	61	91

*Note - Previous reporting category "Secretarial Studies" included all levels of secretarial preparation. Data for 1979-1985 are thus included in the Secretarial and Relation, general category.

Table 48 (Continued)

Discipline Specialty (Major field of study)	Diploma, Certificate Other Recognition						Associate Degrees						Bachelor's Degrees						Master's Degrees						Doctor's Degrees					
COMMUNICATIONS	82	83	84	85	86	87	82	83	84	85	86	87	82	83	84	85	86	87	82	83	84	85	86	87	82	83	84	85	86	87
Communications, gen'l								5	5	3	6	3	82	85	64	70	73	91	2	4	4	4	4	4						
Journalism								4	7	3	4	1	23	31	34	27	38	25												
Radio/Television, gen'l							3																							
Communications, other												1	13	6	5	9	6													
Advertising									3	1				1																
COMPUTER & INFO SCIENCES																														
Computer & Info.Sci.,gen'l						3			15	13	21	10	48	70	64	69	63	64	7	7	7	10	21	22			1		1	
Computer Programming							5																							
Data Processing				1	7	6	74	81	101	87	75	51		1			1													
Info. Sciences & Systems																1														
Systems Analysis																														
Computer & Info.Sci.,Other				-					4			6					6													

COMMUNICATIONS	1982	1983	1984	1985	1986	1987
Total Awards:	123	136	122	117	132	125

COMPUTER & INFORMATION SCIENCES	1982	1983	1984	1985	1986	1987
Total Awards:	134	159	192	180	197	171

Table 48 (Continued)

Discipline Specialty (Major field of study)	Diploma, Certificate Other Recognition						Associate Degrees						Bachelor's Degrees						Master's Degrees						Doctor's Degrees					
EDUCATION	82	83	84	85	86	87	82	83	84	85	86	87	82	83	84	85	86	87	82	83	84	85	86	87	82	83	84	85	86	87
Education, gen'l							2	4	11				5	7	6	6	10	3		3										
Bilingual/Bicultural Educ.																														
Curriculum & Instruction																			32	22	48	37	44	43			2		2	1
Ed. Admin., gen'l																			16	16	13	10	8	7			9	7	2	5
Test. Eval.,Measure,Psch.																			3		2	4		1	2	2		2		
Social Foundations																												1		
Special Ed., gen'l									1		1		10	5	21	12	22	12	14	11	8			4						
Ed. of Gifted									7				26	12								10	9	6						
Ed. of, Emot./Handicapped																														
Student Counc.&Person.Svc.																			37	24	30	29	31	23						
Elementary Ed., gen'l								2	5	7		1	78	76	95	89	103	120												
Pre-Elementary Ed.								6	3	4	1		35	22	27	19	20	13					5							
Agricultural Ed.													2		5	2	3													
Art. Ed.													16	5	9	4	5	4		1			10							
Industrial Arts Ed.,Occ.Ed.								2					3		3	2	3	2	5	1										
Home Economics Ed.													1	3	2	1	1		2	3		1	1							
Business Ed. **								1					12	8	7	8	7	4		1										
Marketing & Distrib. Ed.**								1						5						1										
Mathematics Ed.										1	1			5	2	1	3	9												
Music, Ed.													9	6	9	6	1	2												
Physical Ed.									1	2			53	64	58	35	57	46	9	9	12	10	8	9						
Reading Ed.																			21	11	6	4	2	2						
Science Ed.									3	1			1	1	1	9	4	9												

*Data for years 1979-82 was listed in previous publication under title "educational psychology"
**Obsolete title was Business, Commerce, Distributive Education. For 1983 two titles replace previous single title.

Table 48 (Continued)

Discipline Specialty (Major field of study)	Diploma, Certificate Other Recognition						Associate Degrees						Bachelor's Degrees						Master's Degrees						Doctor's Degrees					
EDUCATION (Cont'd)	82	83	84	85	86	87	82	83	84	85	86	87	82	83	84	85	86	87	82	83	84	85	86	87	82	83	84	85	86	87
English Education															11	9	7	12												
Social Studies Education												1			5		2	2												
Foreign Language Education															4	4	4	7												
Health Education															1															
School Psychology																					5		8	2			2		1	
Teacher Ed., other										1	1				10	3		9				18		17					1	
Parenting Ed.												6			1															
Education, other											1							5						2						1

EDUCATION:	1982	1983	1984	1985	1986	1987
Total Awards:	394	339	424	360	393	390

Table 48 (Continued)

Discipline Specialty (Major field of study)	Diploma, Certificate Other Recognition						Associate Degrees						Bachelor's Degrees						Master's Degrees						Doctor's Degrees					
	82	83	84	85	86	87	82	83	84	85	86	87	82	83	84	85	86	87	82	83	84	85	86	87	82	83	84	85	86	87
ENGINEERING																														
Chemical Engineering										1			57	78	60	63	49	41	19	10	15	18	10	5	11	8	8	8	12	14
Civil Engineering													55	42	42	44	67	61	14	14	14	10	17	12	3	6	2	4	3	1
Elec. & Comunic. Eng.													56	71	71	67	63	52	5	9	9	9	11	6	6	1		6	4	2
Mechanical Engineering													74	75	93	71	67	61	9	12	10	16	17	18	3	1	5	4	2	6
Metallurgical Engineering																			4	2	1	2	2	4	1		1	1	1	2
Agricultural Engineering									2			1			20	20	12	14												
Engineering, other								1										3												
Engineering, Interdisciplinary																				3										
ENGINEERING & RELATED TECHNOLOGIES																														
Archit.Design & Const.Tech.							29	21	27	27	24	18																		
Civil Technologies							25	21	24	9	10	17																		
Drafting & Design Tech.	4				1		10	13	13	11	3	11																		
Electrical Tech.								5	1	3	8	5				1	1													
Electronic Tech.*							82	34	52	58	51	61			1															
Elect.& Electron.Tech.,other								9	4																					
Electromechanical Tech.																														
Instrumentation Tech.							-	16	17	9	28	2																		
Chemical Manufact. Tech.	1	1					8	14	9	11	9	1																		
Industrial Tech.						10	42	30	30	20	29	31					1													

(CONTINUED NEXT PAGE)

Table 48 (Continued)

Discipline Specialty (Major field of study)	Diploma, Certificate Other Recognition						Associate Degrees						Bachelor's Degrees						Master's Degrees						Doctor's Degrees					
ENGINEERING & RELATED	82	83	84	85	86	87	82	83	84	85	86	87	82	83	84	85	86	87	82	83	84	85	86	87	82	83	84	85	86	87
TECHNOLOGIES (Cont'd)																														
Industrial Prod. Tech.								9	19	7	4	7																		
Mechanical & Rel.Tech., other							21	22	16	25	26	13					1													
Agriculture Equip.Tech.								2	6					19																
Engineering Tech., other		6					3	2	4	4		14	21	2	1															
Air Cond./Heat/Refrig.Tech.		3																												
Sanitation Tech.		3																												
Welding Tech.		6	6	9	4	1																								
Automotive Tech.			21				1	1		3	3	4																		
Urban Planning Tech.								2																						
Computer Tech.								10	8	13		19																		
Aeronautical Tech.								2				2																		
Environmental Control Tech.									1	2	1			3																
Food Processing Technology				1					1	2	2	1																		
Quality Control/Safety Tech.									1	5																				
Arch. Interior Design										3	6	4																		
Robotics											6																			
Dual Programs											1																			
Laser Electro-Optic Tech.					2						5																			

ENGINEERING & RELATED TECHNOLOGIES	1982	1983	1984	1985	1986	1987
Total Awards:	564	611	594	567	563	524

Table 48 (Continued)

Discipline Specialty (Major field of study)	Diploma, Certificate Other Recognition						Associate Degrees						Bachelor's Degrees						Master's Degrees						Doctor's Degrees					
	82	83	84	85	86	87	82	83	84	85	86	87	82	83	84	85	86	87	82	83	84	85	86	87	82	83	84	85	86	87
FOREIGN LANGUAGES																														
Foreign Lang.,Multiple Emp.														1	1	3	7	7			2	3		4						
French													10	7	7	6	3	6	5			2	2	2						
German													1	3	3	2		2	1				1	1						
Latin															1															
Russian													1		2	1	1													
Spanish													13	14	5	7	4	4	6	1	3	4	3							
Foreign Lang., Other												1																		

FOREIGN LANGUAGE	1982	1983	1984	1985	1986	1987
Total Awards:	37	26	24	28	21	27

Table 48 (Continued)

Discipline Specialty (Major field of study)	Diploma, Certificate Other Recognition						Associate Degrees						Bachelor's Degrees						Master's Degrees						Doctor's Degrees					
	82	83	84	85	86	87	82	83	84	85	86	87	82	83	84	85	86	87	82	83	84	85	86	87	82	83	84	85	86	87
ALLIED HEALTH																														
Dental Assisting	1	3	12	10	13	8	10	4				2																		
Dental Hygiene							13	11	11	10	12	9																		
Radiograph Med. Tech.							8	3		2	12	5																		
Med. Radiation Dosimetry										11																				
Nuclear Med. Tech.								8	7	6	4	6																		
Respiratory Therapy Tech.							13	16	9	8	9	9																		
Medical Lab. Tech.							9	9	6	2	13	16																		
Medical Technology									1					9	26	27	28	22												
Mental Health/Human Svc.Tech.				1	1	12		41	27	43	31	53																		
Medical Assisting							18	5	11	8	5	5																		
Medical Records Tech.			4				5																							
Medical Office Mgmt.		2		5				5		5																				
Practical Nursing	52	62	64	51	48	43																								
Occupational Therapy								1	3			1																		
Physical Therapy													25	35	30	35	28	33												
Physical Therapy Asst.		3																												
Clinical Lab. Aide			1																											
Music Therapy									2		1																			
Allied Health, other										1																				
HEALTH CONTINUED ON NEXT PAGE																														

Table 48 (Continued)

Discipline Specialty (Major field of study)	Diploma, Certificate Other Recognition						Associate Degrees						Bachelor's Degrees						Master's Degrees						Doctor's Degrees					
HEALTH SCIENCES	82	83	84	85	86	87	82	83	84	85	86	87	82	83	84	85	86	87	82	83	84	85	86	87	82	83	84	85	86	87
Medical Laboratory													29	22																
Nursing, general							121	147	137	143	145	129	203	197	172	206	182	189	23	37	32	29	27	27						
Anesthetist														4	5	5														
Community Health															1		2	1												
HOME ECONOMICS																														
Home Economics, gen'l													10	14	22	14	10	11												
Family/Consumer Res. Mgmt.														46																
Food Sci./Human Nutri..gen'l								3					46	59	5	2	1	4	8	6	3	5	2	4						
Indiv. & Family Deve.. gen'l													26	26	26	18	14	18	1	8	6	2	2	6						
Textiles & Clothing, gen'l													54			1	2	2		1	1			1						
Fashion Design														22			17	31												
Textiles & Clothing, retail									1					52	57	53	69	56												
Textile Science														4	4	3	1	1												
Housing/Furnish. & Equip.													13		29	22														
Consumer Science												1	39		41	28	58	38												
Food/Food Science															6	5	2	6												
Dietetics/Human Nutrition															32	34	30	19												
VOCATIONAL HOME ECONOMICS																														
Food Service Technology							2	3																						
Food Sci./Human Nutr..gen'l															1		4													
Child Dev., Care, Guidance															1	1														

HEALTH	1982	1983	1984	1985	1986	1987
Total Awards:	542	551	587	608	551	567

HOME ECONOMICS	1982	1983	1984	1985	1986	1987
Total Awards:	199	244	236	188	212	198

Table 48 (Continued)

Discipline Specialty (Major field of study)	Diploma, Certificate Other Recognition						Associate Degrees						Bachelor's Degrees						Master's Degrees						Doctor's Degrees					
	82	83	84	85	86	87	82	83	84	85	86	87	82	83	84	85	86	87	82	83	84	85	86	87	82	83	84	85	86	87
LAW																														
Law																									221	222	238	265	261	245
Legal Assisting		2	1	4				2	4	9	4	4																		
Paralegal	2		2		1		18	10	8		7	13																		
LETTERS																														
English, gen'l								2	3	2			66	53	53	42	62	63	10	14	16	20	19	22	6	2	5		2	5
Classics															1		1													
English (film)															5	3														
Creative Writing													1																	
Linguistics														3																2
Literature, American																														
Speech, Debate, Forensics																														
Technical & Business Writing														6	20	18	18	35												
Letters, other																	5	4												

LAW	1982	1983	1984	1985	1986	1987
Total Awards:	241	238	253	265	273	262

LETTERS	1982	1983	1984	1985	1986	1987
Total Awards:	83	81	90	85	90	131

Table 48 (Continued)

Discipline Specialty (Major field of study)	Diploma, Certificate Other Recognition						Associate Degrees						Bachelor's Degrees						Master's Degrees						Doctor's Degrees					
LIBERAL/GENERAL STUDIES	82	83	84	85	86	87	82	83	84	85	86	87	82	83	84	85	86	87	82	83	84	85	86	87	82	83	84	85	86	87
Liberal/General Studies							126	39	19	29	33	38	15	26	14	11	15	8												
LIBRARY & ARCHIVAL SCIENCES																														
Library & Arch.Sci.,gen'l														1																
LIFE SCIENCES																														
Biology, gen'l								4					83	93	126	123	112	126	3	4	2	2		2	6	7	3	4	1	7
Marine Biology																				16						5				
Entomology													12	12	6	6	8	8	5	6	2	5	2	5						
Biological Technology								10	14	17	17	8																		
Ecology/Environ. Sci.									4		1				5															
Plant Psysiology																1														
Environmental Science																4														

LIBERAL/GENERAL STUDIES	1982	1983	1984	1985	1986	1987
Total Awards:	141	65	33	40	48	46

LIFE SCIENCES	1982	1983	1984	1985	1986	1987
Total Awards:	109	157	162	162	141	158

LIBRARY & ARCHIVAL SCIENCES	1982	1983	1984	1985	1986	1987
Total Awards:	-	1	-	-	-	-

Table 48 (Continued)

Discipline Specialty (Major field of study)	Diploma, Certificate Other Recognition						Associate Degrees						Bachelor's Degrees						Master's Degrees						Doctor's Degrees					
MATHEMATICS	82	83	84	85	86	87	82	83	84	85	86	87	82	83	84	85	86	87	82	83	84	85	86	87	82	83	84	85	86	87
Mathematics, gen'l									1		2		18	20	16	34	38	32	3	3	3		3	1	1	3	2		3	5
Statistics													2	1	2	2	1		2	3		4	3	2			1	1	2	
Mathematics, other																		8												
Mathematics/Computer Science															7	7	2													
MULTI/INTERDISCIPLINARY STUDIES																														
Early American Culture																			12	6										
Engineering & Other Discip.								1								1				3										
Professional Arts													30	31	21	36	10													
Applied Professions													4	16	25	31	30													
Selected Studies																														
Marine Studies																					9	14	3	10			7	5	3	7
Multi-Int., Other																		3												
PARKS & RECREATION																														
Parks & Recreation Mgmt.													5		17	10	11	8												
Outdoor Recreation														8	3															

MATHEMATICS	1982	1983	1984	1985	1986	1987
Total Awards:	26	30	32	48	54	48

PARKS & RECREATION	1982	1983	1984	1985	1986	1987
Total Awards:	5	8	3	10	11	8

MULTI/DISCIPLINARY	1982	1983	1984	1985	1986	1987
Total Awards:	46	57	62	87	46	20

Table 48 (Continued)

Discipline Specialty (Major field of study)	Diploma, Certificate Other Recognition						Associate Degrees						Bachelor's Degrees						Master's Degrees						Doctor's Degrees					
PHILOSOPHY & RELIGION	82	83	84	85	86	87	82	83	84	85	86	87	82	83	84	85	86	87	82	83	84	85	86	87	82	83	84	85	86	87
Philosophy													7	7	3	9	9	6	2	3	2	2	1							
PHYSICAL SCIENCES																														
Physical Sciences, gen'l									1	3		3	2	7			3	9		5										
Chemistry, gen'l								1	1		3		47	55	73	54	56	66	10	4	12	4	8	7	9	7	19	13	11	9
Geology													21	36	45	42	31	15	8	5	7	6	13	5	4	1	1	1	1	1
Geophysics & Seismology													1	5		8	6	2												
Oceanography																			17						11		1		3	1
Earth Science																														
Physics, gen'l													7	11	14	13	13	7	4	5	15	6	3	3	8	2	4	5	5	5
Atomic/Molecular Physics															2															
Atmospheric Science & Meteorology																														
PSYCHOLOGY																														
Psychology, gen'l								7	2	4	5	9	109	118	137	126	102	145	7	8	17	7	12	7	7	8	8	10	7	6
Psychology, other									1				32	27	21	27	25	22												

PHILOSOPHY & RELIGION	1982	1983	1984	1985	1986	1987
Total Awards:	9	10	5	11	10	6

PSYCHOLOGY	1982	1983	1984	1985	1986	1987
Total Awards:	155	161	186	147	151	189

PHYSICAL SCIENCES	1982	1983	1984	1985	1986	1987
Total Awards:	149	144	195	156	157	133

Table 48 (Continued)

Discipline Specialty (Major field of study)	Diploma, Certificate Other Recognition						Associate Degrees						Bachelor's Degrees						Master's Degrees						Doctor's Degrees					
PROTECTIVE SERVICES	82	83	84	85	86	87	82	83	84	85	86	87	82	83	84	85	86	87	82	83	84	85	86	87	82	83	84	85	86	87
Correctional Admin.								2																						
Corrections								10	7	7	15	29																		
Crim. Justice Admin.								13				7		16	17	13	13	18												
Crim. Justice Tech.							3		24	29	26	15			1	2	3	1												
Law Enforcement							62		20	16	24																			
Law Enforcement Admin.								14	2																					
Security Services								2	1																					
Fire Control/Safety Tech.							11	15	12	14	8																			
Protective Svcs., other								1																						
Environmental Law									2																					
PUBLIC AFFAIRS																														
Community Services							64						18																	
Public Administration							5												15	16	21	17	18	17						
Public Sanitation																														
Social Work, gen'l														7	8	9	6	7					15	15						
Public Affairs, other							16												3	2		3	2							
Marine Policy																								4						
CONSTRUCTION TRADES																														
Precision Production			1																											
Architectural Drafting			1																											
Mechanical Drafting			1			1																								
Construction Trades, other																														

PROTECTIVE SERVICES	1982	1983	1984	1985	1986	1987
Total Awards:	76	73	86	81	89	70

CONSTRUCTION TRADES	1982	1983	1984	1985	1986	1987
Total Awards:			3			1

PUBLIC AFFAIRS	1982	1983	1984	1985	1986	1987
Total Awards:	121	25	29	29	41	43

Table 48 (Continued)

Discipline Specialty (Major field of study)	Diploma, Certificate Other Recognition						Associate Degrees						Bachelor's Degrees						Master's Degrees						Doctor's Degrees					
SOCIAL SCIENCES	82	83	84	85	86	87	82	83	84	85	86	87	82	83	84	85	86	87	82	83	84	85	86	87	82	83	84	85	86	87
Social Sciences, gen'l								7			3	2	11																	
Anthropology									1	1			17	11	8	11	9	10			1	1		1						
Criminology								2		2	2	1	112	117	128	91	100	110												
Economics								1	2		1	2	97	90	77	84	85	100	12	6	14	16	12	14						
Geography										1		2	42	38	31	21	22	15	2	2	6	4	4	3						
History									1		2		50	48	51	49	46	46	13	17	20	8	10	7	6	1	6	3	2	2
International Relations								2					23	34	37	42	45	59				1		2						
Political Sci./Gov.'t								1			1		110	82	109	89	73	82	5	6	6	4	5	3	2	2	2	1	1	
Sociology								1	1		1	1	68	75	62	53	41	44	4	6	8	3	2	3	3		1	1	2	4
Urban Studies													2		1	1	1		7	9	2		7	5	8		6		6	3
MECHANICS & REPAIRERS																														
Heating/Air Con./Ref.Mech.		3	14	2	12	13						1																		
Cooling & Refrig.				9	8																									
Automotive Mechanics			21	12	20	13					4																			
Diesel Engine Mechanics				4	5																									
Veh. & Mobile Equip. Repair			9	7	5																									

SOCIAL SCIENCES	1982	1983	1984	1985	1986	1987
Total Awards:	594	558	581	489	491	521

MECHANICS & REPAIRERS	1982	1983	1984	1985	1986	1987
Total Awards:	-	3	44	34	54	27

Table 48 (Continued)

Discipline Specialty (Major field of study)	Diploma, Certificate Other Recognition						Associate Degrees						Bachelor's Degrees						Master's Degrees						Doctor's Degrees					
TRANSPORTATION & MATERIAL	82	83	84	85	86	87	82	83	84	85	86	87	82	83	84	85	86	87	82	83	84	85	86	87	82	83	84	85	86	87
MOVING																														
Truck & Bus Driving		49	49	51	57	62																								
Vehicle & Equip.Oper.,other		7																												
Transportation, other																														
Const. Equip. Operator			19	27	3	10																								
Aviation Mgmt.									2																					
VISUAL & PERFORMING ARTS																														
Graphic Design								1	1				11	23	22	19	13	17												
Dramatic Arts								1					4	3	10	5	7	9												
Fine Arts, Gen'l								1			1	1	19	17	32	23	41	25	5	14	14	6	13	7						
Fine Arts, other								2					20	17				1												
Art History & Appreciation													29	22	16	3	7	9	3	10	6	3	3	8	5	1	2	3	5	4
Art Conservation																		3	10	10	9	10		10						
Music, general									3	4	3			7	4	5	4	2												
Music Performance									4			2	7	5	5	1	6	3												
Music, Theory & Compos.									3				2	2				1												

TRANSPORTATION & MATERIAL MOVING	1982	1983	1984	1985	1986	1987
Total Awards:	-	56	70	78	60	72

VISUAL & PERFORMING ARTS	1982	1983	1984	1985	1986	1987
	115	136	131	87	103	102

S142-1-W

DELAWARE POSTSECONDARY EDUCATION COMMISSION

DATA BOOK:

Financing Postsecondary Education in Delaware for FY 1990

February, 1989

DATA BOOK:

Financing Postsecondary Education in Delaware for FY90

Delaware Postsecondary Education Commission

February 1989

Doc. No. 10-02-89/02/01

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INTRODUCTION

In the current year 38,240 students were enrolled in credit courses at Delaware higher education institutions. This is the largest number of students ever participating in higher education in the State. These students, young adults and older adults, invested their time (more than 8 million hours in classroom attendance) and their money ($113.4 million in tuition and fees), to obtain the promised benefits of higher education. Clearly these students have high expectations of our institutions.

The State too has demonstrated its esteem and high expectations for higher education, by appropriating $118.4 million for higher education support in fiscal year 1989. The State shares in the higher education investment and the State - its people, its economy and its culture, share in the rewards and benefits of higher education. The State also must share the responsibility for making certain that higher education's efforts are effective and efficient, are of high standard, and are within the reach of all Delaware citizens. No other level of government has so much responsibility for or investment in higher education.

This responsibility to oversee higher education requires that the State's decision makers understand the functions, needs, and products of Delaware's higher education institutions. Decisions made about investments in higher education have affected and will continue to affect higher education. Decisions about capital spending may affect the quality and/or capacity of programs, but may have little effect on access. Decisions about financial aid may have a significant effect on access, but little effect on quality of education, tuition or faculty salaries. Decisions about faculty salaries may affect quality, but may have little effect on institutional capacity and access. Each decision, whether it is an informed decision or not has an effect on the higher education enterprise.

It is in the context of the importance of each decision that the Postsecondary Education Commission presents its "Data Book" at this point in the budget cycle as background and reference for those who have the responsibility for setting priorities for the funding of higher education. It is the Commission's hope that the "Data Book" provides a basic step in the direction of clearer understanding of the status and the needs of higher education in the State of Delaware.

Data standardized over the years are presented to highlight trends in financing, enrollment and program completion. Comparisons with national data, with regional institutions, and among in-state institutions are presented to provide perspective and benchmarks.

Much of the content herein is presented, therefore, to provide the broad view of postsecondary education in Delaware, a view that will allow the reader to note the long-term effects of some decisions of the past. In other areas, suggestions about possible long-term effects of upcoming decision points are offered.

The Commission is prepared at any time to make specific data available and provide assistance to those involved in the decision processes which affect postsecondary education in Delaware.

Financial Support of Postsecondary Education in Delaware: Some Comparative Measures

FINANCIAL SUPPORT OF POSTSECONDARY EDUCATION IN DELAWARE: SOME COMPARATIVE MEASURES

Each state has a unique relationship to higher education. Differences in governance, organization and financial support make a direct comparison and absolute conclusions difficult. The Commission attempts here, however, to answer questions concerning Delaware's efforts toward funding higher education as they compare to those of other states. Questions about the adequacy of state appropriations are continually raised in Delaware and in all other states. Answers to such questions are drawn using different data and different assumptions, and generally result in a variety of conclusions.

Major Conclusions On Comparisons

The Commission's conclusions are listed below with data and explanations following.

1. Delaware's system of public higher education, because of the number and mix of students at types of institutions, has a theoretical cost requirement* per student that is ranked eighth in the nation, 23% above average.
2. Total resources per student, including tuition and state appropriations, available to Delaware's public institutions rank third in the nation, 42% above average.
3. In considering the financial resources against the theoretical financial requirements of state systems Delaware ranks seventh, 34% above average.
4. The State of Delaware ranks 11th in the nation in the percentage of tax revenue appropriated to higher education, 22% above average.

*Theoretical Cost Requirement or "System Load" considers the number or postsecondary students per 1,000 population and the types (e.g., university, two year college) of institutions attended.

5. On an appropriation per student basis, without considering types of students and other resources, Delaware ranks 15th, 5% above average.

6. The ten-year constant dollar increases in appropriations for higher education in Delaware (21%) ranks ninth in the nation.

7. The ten-year constant dollar increase in public college tuition in Delaware (32%) ranks tenth in the nation.

The above conclusions are drawn from the annual study conducted by Kent Halstead of Research Associates of Washington. Though no set of comparisons can be perfect in comparing fifty different systems of higher education, Halstead's stands out as the most complete and comprehensive national comparison. Halstead's data, segments of which are presented below, published as State Profiles: Financing Public Higher Education 1978-88, lags one year behind the current fiscal year, but barring dramatic annual changes should bear a close resemblance to the current state of affairs.

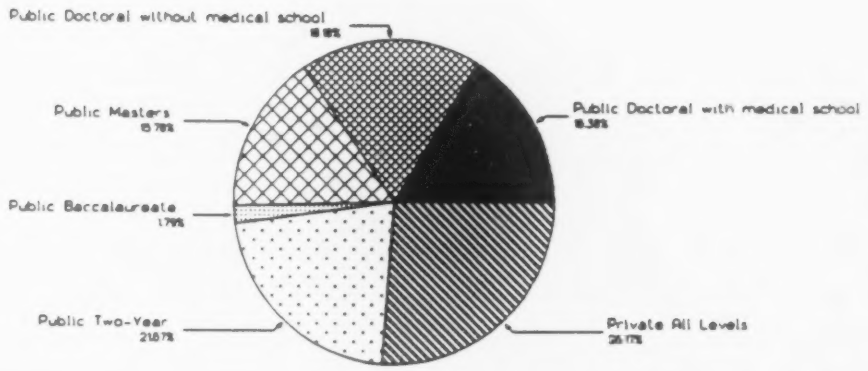
A valuable aspect of Halstead's data is the consideration of system load. This factor considers the number of students enrolled in public colleges per 1,000 state population. Delaware is higher than average on this measure with an index of 116 (100 being average), which places Delaware 13th highest in the nation. The other factor contributing to system load is the type or level of institutions where students are concentrated. A state like Delaware, where students are heavily concentrated at the university level, has a much more expensive system than one in which students are concentrated at two- and four-year colleges. Delaware's institutional concentrations and number of students per capita, place it eighth highest among all states on the system load factor with an index of 123 (Table 2). Simply put, it is an expensive system to support.

Figure 1 displays a comparison of the distribution of students in various postsecondary sectors in Delaware against the national average. The data compiled by the U. S. Center for Education Statistics, are for 1986.

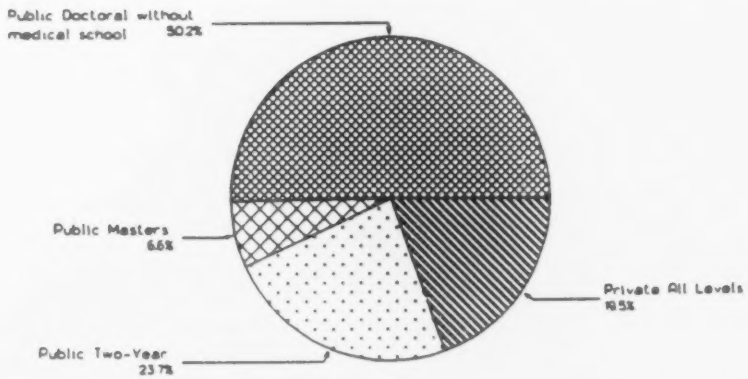
Figure 1

Distribution of College Students Among Segments in Delaware And National Average

U. S. Average



Delaware



Discussion

Several measures are used in Halstead's study to compare states on their support for public higher education. Four relevant state rankings are included as Table 1. The first ranking, Tax Capacity, is based on calculations of the potential of state and local governments to obtain revenues for public purposes through various kinds of taxes. The states' tax capacities are defined as that amount of revenue they could collect if all 50 state-local systems applied identical tax rates (national averages) to their respective tax bases. Delaware ranks sixth on this measure with an index of 123.

The second rating, Tax Effort, compares tax revenue collected as a percentage of tax capacity. On this rating Delaware ranks 47th collecting only 80.4% of the tax dollars defined as its potential tax capacity in this study.

The third rating places Delaware 17th in tax revenue per capita with an index of 99.

The fourth rating compares appropriations for higher education as a percentage of the states' tax revenues. On this measure Delaware ranks eleventh (index 122).

Delaware's appropriations per public college student ranks 15th in the nation, 5% higher than the average state (Table 2). Relative to the system's financial load - i.e., finance theoretically required to support our particular size and mix of students - state apropriations rank 16th, 1% below national average. Delaware's per student appropriations, which can be characterized as average, are complemented by higher than average tuition collection resulting from a large out-of-state student population. Delaware and four other states are footnoted in the Halstead study, as follows: "The payment of high non-resident tuition by a large proportion of out-of-state students, substantially increases tuition revenues and correspondingly reduce appropriation requirements."

Table 1

Four State Ranking Tables From Halstead's State Profiles

Tax Capacity 1986 est.	Dollars per capita	Index
1. ALASKA	$4,015	270
2. WYOMING	$2,379	160
3. NEVADA	$2,171	146
4. CONNECTICUT	$1,918	129
5. DIST COL	$1,859	125
6. DELAWARE	$1,829	123
7. CALIFORNIA	$1,799	121
8. NEW JERSEY	$1,770	119
9. COLORADO	$1,725	116
10. HAWAII	$1,725	116
11. MASSACHUSETTS	$1,695	114
12. NEW HAMPSHIRE	$1,695	114
13. TEXAS	$1,578	106
14. NEW YORK	$1,533	103
15. MARYLAND	$1,533	103
16. FLORIDA	$1,517	102
17. WASHINGTON	$1,503	101
18. MINNESOTA	$1,503	101
19. OKLAHOMA	$1,487	100
20. VIRGINIA	$1,472	99
21. ARIZONA	$1,472	99
22. KANSAS	$1,457	98
23. VERMONT	$1,457	98
24. NORTH DAKOTA	$1,457	98
25. OREGON	$1,427	96
26. NEW MEXICO	$1,427	96
27. ILLINOIS	$1,413	95
28. MICHIGAN	$1,413	95
29. NEBRASKA	$1,398	94
30. LOUISIANA	$1,398	94
31. OHIO	$1,368	92
32. GEORGIA	$1,353	91
33. MISSOURI	$1,353	91
34. PENNSYLVANIA	$1,338	90
35. RHODE ISLAND	$1,338	90
36. MAINE	$1,338	90
37. WISCONSIN	$1,323	89
38. INDIANA	$1,294	87
39. MONTANA	$1,279	86
40. TENNESSEE	$1,264	85
41. NORTH CAROLINA	$1,264	85
42. IOWA	$1,219	82
43. SOUTH DAKOTA	$1,205	81
44. UTAH	$1,204	81
45. KENTUCKY	$1,175	79
46. IDAHO	$1,160	78
47. SOUTH CAROLINA	$1,145	77
48. ALABAMA	$1,130	76
49. WEST VIRGINIA	$1,115	75
50. ARKANSAS	$1,086	73
51. MISSISSIPPI	$1,011	68
UNITED STATES	$1,487	100

Tax Effort 1986 est.	Percent	Index
1. NEW YORK	157.1%	157
2. DIST COL	139.9%	140
3. WISCONSIN	129.1%	129
4. MICHIGAN	119.7%	120
5. IOWA	115.9%	116
6. ALASKA	114.6%	115
7. RHODE ISLAND	113.0%	113
8. MASSACHUSETTS	112.1%	112
9. WYOMING	110.0%	110
10. MINNESOTA	109.7%	110
11. ILLINOIS	107.1%	107
12. MONTANA	105.7%	106
13. UTAH	105.5%	106
14. MAINE	104.2%	104
15. NEW JERSEY	103.9%	104
16. MARYLAND	103.7%	104
17. HAWAII	103.3%	103
18. OHIO	101.6%	102
19. PENNSYLVANIA	101.4%	101
20. WEST VIRGINIA	100.9%	101
21. WASHINGTON	99.4%	99
22. ARIZONA	99.0%	99
23. CONNECTICUT	98.6%	98
24. OREGON	95.5%	96
25. NORTH CAROLINA	95.1%	95
26. SOUTH CAROLINA	95.0%	95
27. MISSISSIPPI	94.9%	94
28. INDIANA	94.6%	94
29. KANSAS	94.0%	94
30. NEBRASKA	93.6%	94
31. VERMONT	92.9%	93
32. CALIFORNIA	92.2%	92
33. GEORGIA	91.7%	92
34. ARKANSAS	91.4%	91
35. SOUTH DAKOTA	91.2%	91
36. IDAHO	88.4%	88
37. LOUISIANA	87.1%	87
38. KENTUCKY	86.7%	87
39. VIRGINIA	86.7%	87
40. NORTH DAKOTA	85.4%	85
41. ALABAMA	84.4%	84
42. COLORADO	83.8%	84
43. NEW MEXICO	83.8%	84
44. OKLAHOMA	83.5%	84
45. MISSOURI	83.4%	83
46. TENNESSEE	83.2%	82
47. DELAWARE	80.4%	80
48. FLORIDA	78.2%	78
49. TEXAS	78.9%	77
50. NEW HAMPSHIRE	65.0%	65
51. NEVADA	64.9%	65
UNITED STATES	100.0%	100

Tax Revenue 1986 est. (83 x 84)	Dollars per capita	Index
1. ALASKA	$4,602	310
2. WYOMING	$2,615	176
3. DIST COL	$2,595	175
4. NEW YORK	$2,406	162
5. MASSACHUSETTS	$1,901	128
6. CONNECTICUT	$1,889	127
7. NEW JERSEY	$1,838	124
8. HAWAII	$1,762	119
9. WISCONSIN	$1,708	115
10. MICHIGAN	$1,691	114
11. CALIFORNIA	$1,659	112
12. MINNESOTA	$1,648	111
13. MARYLAND	$1,588	107
14. ILLINOIS	$1,513	102
15. RHODE ISLAND	$1,513	102
16. WASHINGTON	$1,493	100
17. DELAWARE	$1,471	99
18. ARIZONA	$1,457	98
19. COLORADO	$1,442	97
20. IOWA	$1,413	95
21. NEVADA	$1,408	95
22. MAINE	$1,394	94
23. OHIO	$1,391	94
24. KANSAS	$1,378	93
25. OREGON	$1,363	92
26. PENNSYLVANIA	$1,357	91
27. VERMONT	$1,353	91
28. MONTANA	$1,353	91
29. NEBRASKA	$1,309	88
30. VIRGINIA	$1,276	86
31. UTAH	$1,271	85
32. NORTH DAKOTA	$1,244	84
33. OKLAHOMA	$1,242	84
34. GEORGIA	$1,240	83
35. LOUISIANA	$1,217	82
36. INDIANA	$1,216	82
37. TEXAS	$1,212	82
38. NORTH CAROLINA	$1,201	81
39. NEW MEXICO	$1,193	80
40. FLORIDA	$1,187	80
41. MISSOURI	$1,128	76
42. WEST VIRGINIA	$1,126	76
43. NEW HAMPSHIRE	$1,101	74
44. SOUTH DAKOTA	$1,099	74
45. SOUTH CAROLINA	$1,088	73
46. TENNESSEE	$1,039	70
47. IDAHO	$1,035	69
48. KENTUCKY	$1,019	68
49. ARKANSAS	$992	67
50. ALABAMA	$953	64
51. MISSISSIPPI	$951	64
UNITED STATES	$1,487	100

Allocation to Public Higher Education 1987-88	Education (total) approp as a percent of tax revenue	Index
1. ALABAMA	13.1%	161
2. IDAHO	13.0%	160
3. NORTH CAROLINA	13.0%	160
4. CALIFORNIA	11.4%	140
5. NEW MEXICO	11.1%	137
6. NORTH DAKOTA	10.8%	132
7. UTAH	10.7%	132
8. TENNESSEE	10.3%	127
9. SOUTH CAROLINA	10.2%	125
10. HAWAII	10.1%	124
11. DELAWARE	10.0%	123
12. KANSAS	9.8%	120
13. MINNESOTA	9.7%	119
14. MISSISSIPPI	9.6%	118
15. VIRGINIA	9.5%	116
16. OREGON	9.3%	114
17. ARIZONA	9.3%	114
18. IOWA	9.1%	112
19. WASHINGTON	9.1%	112
20. OKLAHOMA	9.0%	111
21. KENTUCKY	9.0%	111
22. WISCONSIN	8.8%	108
23. INDIANA	8.7%	108
24. WYOMING	8.7%	107
25. ARKANSAS	8.4%	104
26. MONTANA	8.4%	104
27. MISSOURI	8.3%	102
28. TEXAS	8.3%	102
29. MAINE	8.1%	100
30. RHODE ISLAND	7.9%	97
31. MICHIGAN	7.8%	96
32. GEORGIA*	7.8%	96
33. NEBRASKA	7.6%	93
34. MARYLAND	7.5%	93
35. NEVADA	7.3%	89
36. WEST VIRGINIA	7.1%	89
37. OHIO	7.0%	86
38. ILLINOIS	7.0%	86
39. COLORADO	6.8%	83
40. PENNSYLVANIA	6.3%	77
41. MASSACHUSETTS	6.2%	76
42. SOUTH DAKOTA	6.2%	76
43. NEW JERSEY	6.0%	74
44. NEW YORK	5.9%	73
45. FLORIDA	5.8%	72
46. LOUISIANA	5.8%	71
47. CONNECTICUT	5.7%	70
48. NEW HAMPSHIRE	5.5%	68
49. ALASKA	5.2%	64
50. DIST COL	4.4%	54
51. VERMONT	4.1%	50
UNITED STATES	8.1%	100

Table 2

Four State Ranking Tables From Halstead's State Profiles

ENROL
Student Enrollment Load
1987-88
(B1 x B2)

		Annual FTE public students per 1,000 pop	Index
1.	NORTH DAKOTA	44.4	140
2.	WISCONSIN	39.6	133
3.	MINNESOTA	39.0	131
4.	CALIFORNIA	38.4	129
5.	KANSAS	38.3	129
6.	NORTH CAROLINA	37.3	126
7.	WYOMING	36.8	123
8.	ALABAMA	36.8	130
9.	MICHIGAN	35.7	120
10.	COLORADO	35.0	118
11.	OREGON	35.4	119
12.	ARIZONA	35.3	118
13.	DELAWARE	34.6	116
14.	WASHINGTON	33.8	113
15.	UTAH	33.6	113
16.	NEBRASKA	33.0	113
17.	MARYLAND	33.1	111
18.	VIRGINIA	33.0	111
19.	IOWA	32.9	110
20.	TEXAS	32.9	110
21.	MONTANA	32.0	107
22.	NEW MEXICO	31.0	107
23.	MISSISSIPPI	31.0	107
24.	OKLAHOMA	31.1	104
25.	ILLINOIS	30.5	102
26.	SOUTH CAROLINA	30.5	102
27.	IDAHO	29.5	99
28.	OHIO	29.3	98
29.	INDIANA	28.8	96
30.	WEST VIRGINIA	27.8	93
31.	VERMONT	27.4	92
32.	RHODE ISLAND	26.9	90
33.	LOUISIANA	26.8	89
34.	ALASKA	26.6	89
35.	HAWAII	26.1	87
36.	KENTUCKY	26.0	87
37.	MISSOURI	25.8	86
38.	TENNESSEE	25.3	85
39.	SOUTH DAKOTA	25.1	84
40.	NEVADA	24.9	83
41.	ARKANSAS	23.7	79
42.	NEW YORK	23.4	78
43.	NEW HAMPSHIRE	23.2	78
44.	MAINE	22.8	77
45.	PENNSYLVANIA	21.6	72
46.	MASSACHUSETTS	21.5	72
47.	GEORGIA*	20.8	70
48.	FLORIDA	20.4	69
49.	NEW JERSEY	20.0	67
50.	CONNECTICUT	19.6	66
51.	DIST COL	12.3	41
	UNITED STATES	29.8	100

FEDFUT
Education Appropriations & Est. Tuition per Student
APP + TUITION
1978-1988

		Dollars per student	Index
1.	DIST COL	$10,133	191
2.	ALASKA	$10,129	191
3.	DELAWARE	$7,545	142
4.	HAWAII	$7,525	142
5.	NEW YORK	$7,304	138
6.	WYOMING	$6,979	132
7.	NEW JERSEY	$6,950	131
8.	VERMONT	$6,945	131
9.	MASSACHUSETTS	$6,901	130
10.	CONNECTICUT	$6,894	130
11.	MAINE	$6,477	122
12.	PENNSYLVANIA	$6,390	120
13.	RHODE ISLAND	$6,310	119
14.	GEORGIA*	$6,009	113
15.	MICHIGAN	$5,779	109
16.	NEW HAMPSHIRE	$5,701	108
17.	IOWA	$5,685	107
18.	TENNESSEE	$5,583	105
19.	WISCONSIN	$5,548	105
20.	INDIANA	$5,511	104
21.	CALIFORNIA	$5,413	102
22.	MINNESOTA	$5,340	101
23.	SOUTH CAROLINA	$5,260	99
24.	VIRGINIA	$5,231	99
25.	MARYLAND	$5,207	99
26.	IDAHO	$5,182	98
27.	UTAH	$5,151	97
28.	OHIO	$5,147	97
29.	MISSOURI	$5,139	97
30.	NEVADA	$5,103	96
31.	WASHINGTON	$5,044	95
32.	NEW MEXICO	$4,949	93
33.	NORTH CAROLINA	$4,855	92
34.	ARIZONA	$4,847	91
35.	ALABAMA	$4,833	91
36.	KENTUCKY	$4,811	91
37.	ARKANSAS	$4,808	91
38.	OREGON	$4,787	90
39.	KANSAS	$4,653	88
40.	MONTANA	$4,501	85
41.	COLORADO	$4,495	85
42.	OKLAHOMA	$4,493	85
43.	ILLINOIS	$4,401	83
44.	FLORIDA	$4,349	82
45.	NORTH DAKOTA	$4,338	82
46.	MISSISSIPPI	$4,295	81
47.	NEBRASKA	$4,183	79
48.	LOUISIANA	$4,147	78
49.	WEST VIRGINIA	$4,023	76
50.	TEXAS	$3,891	73
51.	SOUTH DAKOTA	$3,838	72
	UNITED STATES	$5,303	100

Tuition Factor
1987-88

		Tuition as percent of approp + tuit Percent	Index
1.	VERMONT	70.8%	301
2.	NEW HAMPSHIRE	54.1%	229
3.	DELAWARE	43.9%	186
4.	COLORADO	38.9%	165
5.	PENNSYLVANIA	38.5%	163
6.	LOUISIANA	36.3%	154
7.	MICHIGAN	36.3%	154
8.	OHIO	35.4%	150
9.	MISSISSIPPI	33.3%	141
10.	INDIANA	32.6%	138
11.	WISCONSIN	31.9%	136
12.	IOWA	31.3%	133
13.	SOUTH CAROLINA	31.0%	131
14.	MARYLAND	30.8%	130
15.	NORTH DAKOTA	30.5%	129
16.	VIRGINIA	30.0%	127
17.	RHODE ISLAND	29.9%	127
18.	SOUTH DAKOTA	29.5%	125
19.	NEBRASKA	29.0%	123
20.	MISSOURI	28.9%	123
21.	WEST VIRGINIA	28.3%	120
22.	ALABAMA	27.7%	118
23.	ARKANSAS	26.6%	113
24.	KENTUCKY	26.4%	112
25.	OREGON	25.1%	107
26.	KANSAS	25.1%	106
27.	MAINE	23.8%	101
28.	TENNESSEE	23.7%	101
29.	MINNESOTA	23.6%	100
30.	GEORGIA*	22.8%	97
31.	FLORIDA	22.3%	94
32.	ILLINOIS	21.7%	92
33.	TEXAS	21.7%	92
34.	UTAH	21.5%	91
35.	ARIZONA	21.3%	90
36.	MONTANA	20.8%	88
37.	CONNECTICUT	20.7%	88
38.	MASSACHUSETTS	20.6%	87
39.	WASHINGTON	20.5%	87
40.	NEW JERSEY	20.3%	86
41.	NEVADA	20.0%	85
42.	OKLAHOMA	19.8%	84
43.	NEW YORK	16.3%	69
44.	NEW MEXICO	15.7%	67
45.	NORTH CAROLINA	13.0%	55
46.	IDAHO	13.0%	55
47.	WYOMING	11.1%	47
48.	ALASKA	10.7%	45
49.	HAWAII	9.0%	41
50.	CALIFORNIA	9.1%	39
51.	DIST COL	8.0%	34
	UNITED STATES	23.6%	100

Education Appropriations per Student 1987-88 (TAX x B5/ENROLL)

		Dollars per student	Index	Relative to system financial load Index	Rank	10-year constant dollar change
1.	DIST COL	$9,320	220	220	(2)	11.0%
2.	ALASKA	$9,848	233	237	(1)	-10.1%
3.	HAWAII	$6,805	160	163	(4)	9.3%
4.	WYOMING	$6,393	153	150	(5)	6.9%
5.	NEW YORK	$6,115	151	164	(3)	23.1%
6.	NEW JERSEY	$5,540	137	145	(8)	20.8%
7.	MASSACHUSETTS	$5,402	135	139	(9)	18.5%
8.	CONNECTICUT	$5,488	135	139	(7)	7.7%
9.	MAINE	$4,930 D	122	116	(10)	89.1%
10.	CALIFORNIA	$4,920	121	133	(9)	4.9%
11.	GEORGIA*	$4,831	114	110	(11)	29.1%
12.	IDAHO	$4,513	111	106	(13)	-8.8%
13.	RHODE ISLAND	$4,433	109	106	(12)	0.0%
14.	TENNESSEE	$4,344	106	97	(17)	34.0%
15.	DELAWARE	$4,344 D	106	99	(16)	21.3%
16.	NORTH CAROLINA	$4,183	103	104	(14)	39.5%
17.	NEW MEXICO	$4,172	103	91	(25)	1.0%
18.	NEVADA	$4,088	101	96	(20)	-8.4%
19.	MINNESOTA	$4,080	101	97	(19)	-11.4%
20.	UTAH	$4,045	100	93	(21)	-8.4%
21.	WASHINGTON	$4,010	99	103	(15)	-7.0%
22.	PENNSYLVANIA	$3,930	97	97	(18)	-11.0%
23.	IOWA	$3,903	96	88	(29)	-9.3%
24.	ARIZONA	$3,814	94	93	(23)	13.3%
25.	WISCONSIN	$3,786	94	92	(22)	-13.4%
26.	INDIANA	$3,752	93	83	(37)	-8.3%
27.	MICHIGAN	$3,684	91	88	(28)	-4.6%
28.	VIRGINIA	$3,684	90	87	(34)	19.1%
29.	MISSOURI	$3,653	90	88	(30)	-9.0%
30.	SOUTH CAROLINA	$3,633	90	90	(26)	-9.3%
31.	MARYLAND	$3,615	89	92	(24)	-0.8%
32.	OKLAHOMA	$3,603	89	87	(33)	13.9%
33.	OREGON	$3,583	88	89	(27)	-3.0%
34.	MONTANA	$3,563	88	78	(40)	-3.7%
35.	KENTUCKY	$3,539	87	81	(38)	-19.1%
36.	ARKANSAS	$3,533	87	86	(35)	-0.8%
37.	ALABAMA	$3,493	86	83	(36)	11.8%
38.	KANSAS	$3,488	86	86	(39)	-5.1%
39.	ILLINOIS	$3,448	85	88	(31)	-7.3%
40.	FLORIDA	$3,388	84	87	(32)	6.0%
41.	OHIO	$3,334	82	78	(41)	5.9%
42.	TEXAS	$3,048	75	75	(42)	-3.8%
43.	NORTH DAKOTA	$3,010	74	80	(45)	-20.2%
44.	NEBRASKA	$2,955	73	71	(43)	-21.0%
45.	WEST VIRGINIA	$2,883	71	80	(46)	-9.7%
46.	MISSISSIPPI	$2,867	71	70	(44)	-9.3%
47.	COLORADO	$2,745 D	68	65	(47)	1.2%
48.	SOUTH DAKOTA	$2,705	67	59	(49)	-24.5%
49.	LOUISIANA	$2,641	65	58	(50)	-23.0%
50.	NEW HAMPSHIRE	$2,618 D	65	62	(48)	-0.5%
51.	VERMONT	$2,618 D	50	43	(51)	-10.1%
	UNITED STATES	$4,053	100	100		3.5%

When Delaware's higher than average tuition receipts are factored in as the second column in Table 2, Delaware ranks third in total support, 42% above average.

It should be obvious that the resident/non-resident factor (discussed in detail on pp.) plays an important role in Delaware higher education finance. The out-of-state student swells our public college population beyond what would be expected from Delaware's population base. This results in both greater costs and greater tuition income.

All of the data referenced above are aggregated at the state level. The conclusions must be drawn that Delaware public higher education in the aggregate is adequately supported. The distribution of this support among the three levels - community college, four-year and university levels can be compared to other states and national averages, using data published by The Center For Education Statistics in State Higher Education Profiles: 1988 Edition (using 1986 data).

For comparison purposes, the national averages of revenue per student from six categories (including state appropriations) are included in Tables 3 to 5 within three state groupings. The first group of states have been selected because they enroll a large percentage of out-of-state students. The second grouping consists of neighboring states. The third group is made up of other small states.

Three separate tables are presented to compare Delaware's three public higher education institutions: Table 3, UD (doctoral without medical school): Table 4, DSC (Master's level): and Table 5, DTCC (two-year). The one state which is not directly comparable at the doctoral level is Vermont. Its doctoral level includes a medical school. Because of Vermont' strong similarity to Delaware relative to in-state and out-of-state students it is included even though the medical school difference exists.

The data in Tables 3, 4 and 5 are self-explanatory, and the conclusions drawn will depend on the reader's perception of how the State of Delaware should fund higher education.

Delaware's per student contribution, is lower than the national average for doctoral level institutions, but in Delaware's situation, where over half of the students in the "per-student" calculation are not state residents, the level of per-student funding appears to be appropriately balanced by a higher tuition intake. The appropriateness can be concluded from the previously cited Halstead data which show that the combination of state appropriations and tuition provides Delaware's public institutions with the third highest level of support in the nation.

Delaware's per student appropriations to its master's level institutions (Table 4) far surpass those of the comparison states listed and the national average.

State per student appropriations at the two-year college level (Table 5) are approximately at the national average and roughly in line with the comparison states.

Table 3

Revenues Per FTE Student 1986

Doctoral Institution Without Medical	Tuition & Fees Per Student	Federal Appropriation Per Student	State and Local Appropriation Per Student	Fed. Gov't Grants Contracts Per Student	Income from Private Sources	Sales & Services Of Auxiliary Enterprises Per Student	Total All Sources Per Student
Delaware	$3,939	$147	$3,443	$ 925	$1,618	$1,877	$11,939
Vermont*	5,691	334	2,412	$2,614	1,751	2,157	14,959
Maine	1,764	250	3,646	1,017	457	1,632	8,766
Colorado	2,876	0	2,511	1,549	543	1,476	8,955
Pennsylvania	3,255	368	3,724	1,165	1,222	2,530	12,265
New Jersey	2,577	94	6,338	778	509	1,454	11,750
New York	1,750	0	7,303	1,029	534	924	11,540
Maryland	2,145	4	5,037	1,600	238	1,405	10,425
Virginia	2,186	20	3,400	191	225	1,599	7,621
New Hampshire	3,843	5	2,543	1,909	545	1,664	10,509
Wyoming	1,088	1,473	8,725	1,153	983	2,270	15,692
Nevada	1,378	3	3,681	547	357	738	6,704
South Dakota	1,674	652	3,831	415	119	993	7,684
North Dakota	1,538	575	4,605	496	381	1,808	9,403
US Avg. Public Doctoral Without Medical School	$1,828	$77	$4,627	$881	$480	$1,474	$9,367
US Avg. Private Doctoral Without Medical School	$6,566	$72	$111	$1,313	$2,410	$1,695	$12,167

*With Medical School

Source of Data: State Higher Education Profiles, 1988 Edition. US Office of Educational Research and Improvement, US Department of Education.

Table 4

Revenues Per FTE Student 1986

Master's Level Institutions	Tuition & Fees Per Student	Federal Appropriation Per Student	State and Local Appropriation Per Student	Fed. Gov't Grants Contracts Per Student	Income from Private Sources	Sales & Services Of Auxiliary Enterprises Per Student	Total All Sources Per Student
Delaware	$1,334	$5	$7,249	$ 972	$80	$1,163	$10,803
Vermont	2,882	0	1,929	680	21	1,769	7,281
Maine	N/A	---	---	---	---	---	---
Colorado	1,655	0	2,725	428	134	891	5,833
Pennsylvania	2,075	4	3,794	185	60	985	7,103
New Jersey	1,409	13	3,396	159	24	977	5,978
New York	1,594	15	5,174	148	128	795	7,854
Maryland	1,879	0	3,203	276	72	1,297	6,727
Virginia	1,420	1	3,191	345	31	2,460	7,448
New Hampshire	2,614	0	1,698	321	80	1,638	6,351
Wyoming	N/A	---	---	---	---	---	---
Nevada	N/A	---	---	---	---	---	---
South Dakota	1,538	0	2,067	350	79	1,058	5,092
North Dakota	1,324	0	1,995	160	76	872	4,427
US Avg. Public Master's Level	1,389	5	3,946	256	95	1,006	6,697
US Avg. Private Master's Level	5,593	13	88	360	1,310	1,539	8,903

Source of Data: State Higher Education Profiles, 1988 Edition. US Office of Educational Research and Improvement, US Department of Education.

Table 5

Revenues Per FTE Student 1986

Two-Year Colleges	Tuition & Fees Per Student	Federal Appropriation Per Student	State and Local Appropriation Per Student	Fed. Gov't Grants Contracts Per Student	Income from Private Sources	Sales & Services Of Auxiliary Enterprises Per Student	Total All Sources Per Student
Delaware	$402	$ 0	$3,341	$428	$ 0	0	$4,171
Vermont	$1,922	0	1,791	447	32	$1,064	5,256
Maine	756	257	4,946	296	3	314	6,572
Colorado	1,142	2	3,159	270	13	600	5,186
Pennsylvania	1,752	2	2,205	211	24	366	4,560
New Jersey	1,263	0	2,619	135	25	241	4,283
New York	1,355	3	3,347	96	33	233	5,067
Maryland	1,288	4	3,624	272	41	286	5,515
Virginia	921	0	2,646	246	28	55	3,896
New Hampshire	1,652	6	3,012	113	0	122	4,905
Wyoming	473	0	5,971	144	82	812	7,482
Nevada	598	0	2,549	207	16	17	3,387
South Dakota	N/A	---	---	---	---	---	---
North Dakota	1,255	195	2,831	201	96	970	5,548
US Avg. Public Two-Year	797	22	3,050	191	33	292	4,385
US Avg. Private Two-Year	3,583	43	55	240	943	1,141	6,005

Source of Data: State Higher Education Profiles, 1988 Edition. US Office of Educational Research and Improvement, US Department of Education.

COMPARATIVE SUPPORT OF THE THREE PUBLIC COLLEGES FISCAL YEAR 1988-89 APPROPRIATIONS

Overall State appropriations for the three public institutions increased 5.1 percent from FY 1988 to FY 1989.

The percentage increase for each college is shown below.

	FY88 Approp.	FY89 Approp.	% Change
UD	$65,744.3	$68,722.6	+4.53
DSC	16,754.5	17,900.4	+6.84
DTCC	25,981.5	27,613.9	+6.28

If debt service is excluded, thus leaving appropriations for operating budgets only, the resulting increase is somewhat different, as shown below.

	Operating FY88 Budget	Operating FY89 Budget	% Change
UD	$59,489.2	$62,831.6	+5.62
DSC	14,977.1	16,240.7	+8.44
DTCC	22,285.3	24,148.8	+8.36

State appropriated debt service payments for the three public institutions decreased 6.1% from FY88 to FY89. The percentage decrease for each college is shown below.

	FY88 Appropriated Debt Service	FY89 Appropriated Debt Service	% Change
UD	$6,255.1	$5,891.0	-5.82
DSC	1,777.4	1,659.0	-6.62
DTCC	3,696.2	3,465.1	-6.25

Table 6

Net State Support Per FTE For The Three Public Colleges
FY79 - FY89

	FY79	FY80	FY81	FY82	FY83	FY84	FY85	FY86	FY87	FY88	FY89
U of D											
Current Expense	1,870	1,966	2,469	2,795	2,968	3,045	3,278	3,565	3,715	3,819	3,908
Debt Service	322	335	323	316	354	395	391	393	420	402	366
TOTAL	2,192	2,301	2,792	3,111	3,322	3,440	3,669	3,958	4,135	4,221	4,274
DSC											
Current Expense	3,550	4,126	4,970	5,528	6,154	6,526	6,949	7,424	8,195	8,091	8,068
Debt Service	725	703	694	643	692	855	819	913	1,051	960	824
TOTAL	4,275	4,829	5,664	6,171	6,845	7,381	7,768	8,337	9,246	9,051	8,892
DTCC*											
Current Expense	3,062	2,681	2,964	3,492	3,417	3,441	3,886	4,488	4,630	4,717	4,333
Debt Service	683	548	494	444	485	581	605	676	715	782	622
TOTAL	3,745	3,229	3,453	3,936	3,902	4,022	4,491	5,164	5,345	5,499	4,955

*FTE (Full-time equivalent) figures used for calculation include Parallel Program students.

Table 7

Net State Support For Current Expenses Per FTE For The Three Public Colleges in Constant (FY76) Dollars

FY	UD	DSC	DTCC
76	$1,633	$2,733	$1,981
77	1,592	2,882	2,109
78	1,511	2,805	2,404
79	1,529	2,903	2,504
80	1,463	3,069	1,994
81	1,659	3,340	1,991
82	1,707	3,376	2,133
83	1,705	3,536	1,963
84	1,660	3,558	1,876
85	1,675	3,550	1,986
86	1,745	3,633	2,196
87	1,745	4,011	2,266
88	1,722	3,800	2,215
89*	1,680	3,469	1,863

*Inflation measured by the Higher Education Price Index. (Estimated to be 4.4% for FY89.)

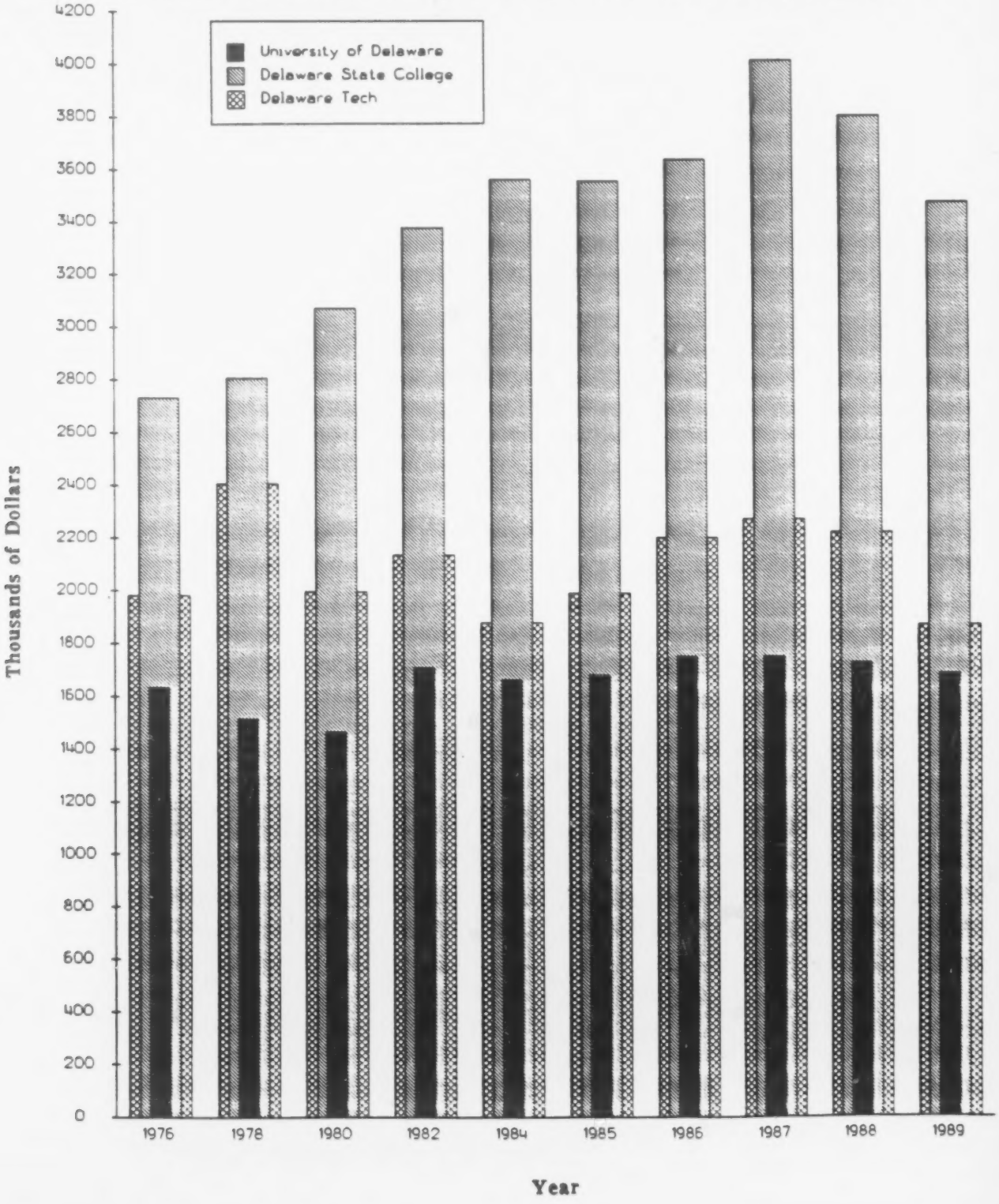
Table 7 compares State appropriations for operating expenses (not debt service) at the three public institutions in constant 1976 dollars, using the Higher Education Price Index.

Table 7 indicates that appropriations in support of the University of Delaware on a per student basis increased 2.9% ($47) in constant dollars from 1976 to 1989. Support for Delaware State College grew 27% ($736) in constant dollars from 1976 to 1989. Delaware Technical and Community College saw a 1976-1989 decrease of 5.9% ($118) in constant dollars.

The 1988-89 decreases in constant dollars per FTE results from enrollment, increases rather than decreasing appropriations.

Figure 2

Net State Support For Current Expenses Per FTE For The Three Public Colleges in Constant (FY76) Dollars



The percentage decreases in constant (1976) dollars for each institution from 1988 to 1989 were:

University of Delaware	-2.4%
Delaware State College	-8.7%
Delaware Technical & Community College	-15.9%

Total Expenditures Per Student

While Tables 6 and 7 above break out net State support on a per student basis, these figures should not be interpreted as total expenditures per student at each institution. In addition to State support the student's education is supported by tuition, endowment earnings, gifts and donations, and federal funds.

The most comparable data available to the Commission for the comparison of total per student costs at each of the public colleges is "Education and General Expenditures" per FTE. E & G expenditures include all institutional expenditures except auxiliary services and other independent operations.

Table 8 compares the three public institutions on this measure. The data in Table 8 were compiled on the same basis as that for Table 9, explained below, with one exception. Figures in Table 8 do not include State appropriated debt service.

Table 8

Total Education and General Expenditures Per FTE For Three Public Colleges For The Year Completed June 30, 1988

	FTE	Total E & G Expenditures	Total E & G Expenditures Per FTE
UD	16,076	$214,179,345	$13,322
DSC	2,013	$21,412,871	$10,637
DTCC	5,572	$31,335,200	$5,624

An overall State perspective on higher education costs per student is contained in Table 9. To obtain uniform comparisons, the following procedures have been utilized. The base figures for all colleges were taken from Part B, Line 12 of the IPEDS Financial Statistics form. This figure represents Total Educational and General Expenditures. It includes all expenditures except those for auxiliary services and independent operations (e.g., dormitories, food service).

Since the independent colleges listed in Table 9 make mortgage payments for their physical plant, and include these within total E & G expenditures, the debt service paid by the State for the public institutions is added to their total E & G expenditures. In addition, the State appropriation made to the DTCC President's office is added to the E & G expenditures of the DTCC campuses - again, for uniformity. FTE figures used are derived by adding 1/3 of the part-time students to the full-time student enrollment.

Table 9

Total Education and General Expenditures Per FTE
For All Delaware Colleges For The Year Completed
June 30, 1988

	FTE	Total E & G Expenditures	Total E & G Expenditures Per FTE
UD	16,076	$220,070,345	$13,689
DSC	2,013	$23,072,571	$11,461
DTCC	5,572	$34,800,300	$6,245
Goldey Beacom	1,171	$6,443,733	$5,503
Wesley	945	$6,142,548	$6,500
Widener, DE*	1,662	$16,650,099	$10,018
Wilmington	745	$3,675,884	$4,934

*Widener, DE includes Brandywine College and Widener University School of Law.

It should be noted here, for those who might be inclined toward conjecture about the nature of the variance in costs among the colleges, that the variance cannot be totally attributed to management efficiency. Some varieties of education are less expensive than others. Some institutions are comprehensive colleges offering a wide range of majors while others are single purpose institutions. Additionally, some colleges offer physical education, music, art, sports programs, social and cultural programs, and the like. All of these facets of the colleges' program add to the cost and to the students' education.

Capital Improvement Funding for Postsecondary Education

CAPITAL IMPROVEMENT FUNDING FOR POSTSECONDARY EDUCATION

Each year, in addition to operating funds requested by the state supported colleges, requests for bond authorization for major capital items are made. The requests granted are included in the annual capital improvements act, and ultimately the costs are reflected in the college budgets of the future as debt service, maintenance and utility expenditures.

Because authorizations for major capital expenditures reflect institution expansion and renovation, because they are reflective of programmatic needs, and because they are ultimately reflected as ongoing operational expenses, the Commission feels that such requests should be examined as an integral part of the budget review process. Thus, the Commission includes here the following review of capital authorizations providing a look at the past and overview of projected requests.

Table 10

Summary of Capital Appropriations FY76-89
and Current Requests

SUMMARY

(Details follow: see Tables)

Year	U of D	DSC	DTCC	Total
FY76-FY89 Authorized	$44,859,200	$15,822,513	$30,189,322	$90,871,035
% of Total	49%	18%	33%	
FY89 Authorized	$3,701,200	$1,445,000	$4,205,582	$9,351,782
% of Total	40%	15%	45%	
FY90 Request	$17,896,000	$7,953,600	$9,822,300	$35,671,900
FY91 Request	$19,240,000	$4,860,500	$4,104,000	$28,204,500
FY92 Request	$19,840,000	$9,130,000	$119,000	$29,089,000

Notes: (1) Figures for FY76 through FY89 are authorized levels, which are not necessarily equal to final expenditures.
(2) Figures for FY90-FY92 are requests submitted by the institutions (BUD41: Capital Budget Summary).

Table 10 shows the distribution of authorized capital spending among the three public institutions. Authorized amounts for FY89 differ, in terms of percentage distribution, from the distribution trend recorded for the fourteen year period 1976-1989. The University's share is greater over the fourteen year period, but Delaware Tech received the largest share of authorized funding for FY89. Delaware State Colleges' share is somewhat less in FY89 than it has been over the extended period.

Table 11 breaks the fourteen year period into two segments to further examine the capital funding trend. It is apparent that a shift in capital funding distribution has occurred during the period in the direction of a more even distribution among the three institutions. Whether this trend in capital funding is appropriate for the State's system of higher education can only be a matter of conjecture without further detailed study.

Table 11

Comparison of Amount and Percentage Distribution of Higher Education Capital Fund For Two Periods

	U of D	DSC	DTCC	Total
FY76-FY82 (7 years)	$22,585,000 64%	$4,303,000 12%	$8,251,300 24%	$35,139,300 100%
FY83-FY89 (7 years)	$22,274,200 40%	$11,519,513 21%	$21,938,022 39%	$55,731,735 100%

In an environment in which no institution is an isolated entity and all must compete for limited capital funds, methods of evaluation must be available to those agencies responsible for approving or providing the resources requested by the colleges.

Table 12

Capital Budget Requests FY90-FY92

As Presented, In Rank Order, In Institutional Request

Delaware State College	1990	1991	1992
1. Minor Capital Improvements	$493,600	$450,000	$450,000
2. Library Addition	$5,500,000		
3. Exterior Renovation, Humanities Bldg.	$1,000,000		
4. Expansion of Science Center	$300,000	$3,000,000	
5. Alumni Field, Stadium Improvement	$310,000		
6. Construction & Lights - Tennis Courts	$100,000		
7. Memorial Hall Additions	$250,000		
8. Road Resurfacing		$300,000	
9. Economics & Business Administration Building		$500,000	$4,500,000
10. Silver Lake Development		$610,500	
11. New Administration Building			$280,000
12. New Residence Hall			$2,600,000
13. Stadium Expansion			$1,300,000
DSC TOTALS	$7,953,600	$4,860,500	$9,130,000

Table 13

Capital Budget Requests FY89-FY90

As Presented, In Rank Order, In Institutional Request

Delaware Technical & Community College	1990	1991	1992
1. Lab Building Construction - Terry	$2,600,000		
2. Trades & Industry Bldg. - Southern	$660,000		
3. Equipment/MCI - Wilmington	$300,000		
4. Equipment/MCI - Stanton	$300,000		
5. Data Communications Equipment - Pres.	$225,000		
6. Instructional Computers - Terry	$31,300		
7. Renovation of Science Labs - Southern	$211,200		
8. Industrial Training Facility - Stanton	$250,000		
9. Computer Equipment - Pres.	$16,000		
10. Instructional & Support Equipment - Terry	$147,000		
11. Minor Capital Equipment - Southern	$178,800		
12. Parking Lot Repaving - Stanton	$50,000	$60,000	$75,000
13. Mini Computer - Pres.	$25,000		
14. Miscellaneous MCI - Terry	$180,100		
15. Library Books - Southern	$50,000		
16. Office Furn./Equip. - Pres.	$9,200		
17. Storage & Maint. Bldg. - Terry	$44,700		
18. Tuition Accounting System - Pres.	$90,000		
19. Renovation of Existing Facilities - Terry	$300,000		
20. Higher Education Facility - Southern	$2,500,000	$4,000,000	
21. Child Care Center - Southern	$162,500		

Capital Budget Requests - Delaware Technical & Community College (Continued)

		1990	1991	1992
22.	Financial Aid Accounting System - Pres.	$37,500		
23.	Athletics & Recreation - Southern	$105,000		
24.	Industrial Training Bldg. - Terry	$1,125,000		
25.	Repair of Roads and Paving - Southern	$180,000		
26.	Computer Upgrades - Southern	$44,000	$44,000	$44,000
	DTCC TOTALS	$9,822,300	$4,104,000	$119,000

Table 14

Capital Budget Requests FY90-FY92

As Presented, In Rank Order, In Institutional Requests

University of Delaware	FY90	FY91	FY92
1. College of Human Resources, Classroom/Lab Additions	$1,250,000		
2. Chemistry, Biochemistry & Marine Science Building	$6,000,000	$7,000,000	$7,000,000
3. College of Business & Economics Building	$5,000,000	$6,000,000	$6,050,000
4. Student Center	*	*	*
5. Undergraduate Laboratory Instruction Equipment	$2,310,000	$2,540,000	$2,790,000
6. Building Renewal	$3,336,000	$3,700,000	$4,000,000
UD TOTALS	$17,896,000	$19,240,000	$19,840,000

*Cost estimates not yet available.

Table 15

Capital Authorizations for Postsecondary Education FY76-FY89

Year	University of Delaware		Delaware State College		Delaware Technical & Community College	
FY76	$7,355,000	$7,000,000 Life Science Bldg. $210,000 Del. Sea Grant $145,000 Swine Program	$250,000	Lockerman Hall Renovation	$529,000	$100,000 Wilm. Demolition & Clearance $17,000 Payback: Advance Land Acquisition $20,000 Georgetown Campus Sewer $392,000 Kent Campus Furnishing
FY77	$1,350,000	$950,000 Lilfe Science Equip. $400,000 Ag. Science Bldg. Design	$150,000	Health & Phys. Ed. Facility	$268,300	$200,000 Wilmington Campus $18,300 Stanton Campus Equip. $50,000 Southern Campus Parking
FY78	$3,030,000	$3,000,000 Ag. Science Bldg. $30,000 Ag. Sub. Station	$450,000	Football Field Stadium Bleachers	--	
FY79	--		--		$132,000	Southern Campus Facilities Survey and Design
FY80	$3,400,000	$270,000 Eng. Bldg. Design $30,000 Georgetown Sub. Station $3,100,000 Ag. Science Bldg.	$403,000	$203,000 Minor Capital Repairs $200,000 Football Stadium Bleachers	$796,000	$400,000 Southern Campus Library Design $16,000 Stanton Campus Roads $320,000 Stanton Campus Equip. $35,000 Terry Campus Maintenance Garage $25,000 Terry Campus Motel Demolition
FY81	$2,950,000	$450,000 Lewis Marine Complex Site Improvement $2,500,000 Engineering Building Phase I	$1,100,000	$100,000 Minor Capital Improvement $1,000,000 Gymnasium Renovation and Addition	$2,290,000	$15,000 Terry Equipment $700,000 Terry Indus. Trng. $500,000 Southern Campus Roof Repair $1,000,000 Southern Campus Library $75,000 Wilm. Campus Bldg. Renov.
FY82	$4,500,000	$4,500,000 Engineering Building Phase II	$1,950,000	$1,500,000 Health & Phys. Ed. Bldg. $350,000 Dormitory Renovation $100,000 Minor Capital Improvement	$4,236,000	$3,500,000 Library, Southern $136,000 Equipment, Terry $600,000 Land Acquisition and Facility Development

Capital Authorization for Postsecondary Education FY76-FY89 (Continued)

Year	University of Delaware		Delaware State College		Delaware Technical & Community College	
FY83	$4,625,000	$4,500,000 Engineering Building $110,000 Morris Library Addition (design) $15,000 Agriculture Substation Equipment	$2,400,000	$1,600,000 Tubman Hall and/or Dining Hall $350,000 ETV Bldg. Improvements $350,00 New Maintenance Facility $100,000 Misc. Minor Capitol Improvement	$2,357,000	$650,000 Administration Building $75,000 Terry Campus-equipment $480,000 Stanton Campus-equipment $72,000 Wilmington Campus-equipment $30,000 HVAC - MCI (Terry) $950,000 Wilmington Campus (Land Acquisition, Facil. Dev.) $100,000 Southern Campus Misc.-MCI
FY84	$2,550,000	$2,500,000 Morris Library Addition $50,000 Ag. Substation, Irrigation	$2,200,000	$2,100,000 Tubman Hall & Dining Hall Completion $100,000 Minor Capital Improvement	$2,850,000	$100,000 Stanton, equipment $100,000 Terry, equipment $50,000 Southern, equipment $50,000 Wilmington, minor capital $50,000 Terry, Administration Bldg. $2,500,000 Wilmington, New Building
FY85	$3,750,000	$3,500,000 Morris Library Addition $250,000 Central Fire Control Panel		$1,000,000 Delaware Hall-completion $30,000 Old Library Renovation $370,000 Tubman/Conrad Hall - Completion $615,000 Pedestrian Overpass - Rt. 13 $100,000 MCI		$4,500,000 Wilmington Campus II/III $100,000 Terry Campus - MCI $20,000 Statewide - MCI $50,000 Stanton & Georgetown equip.
FY86	$3,805,000	$2,890,000 Morris Library Addition $750,000 Composit Manufacturing Bldg. $40,000 Swine Research Facility $125,000 Athletic Complex: Plan/design		$150,000 Renovation: Lookerman Hall $170,000 Renovation: Library $350,000 Air Conditioning $200,000 Minor Capital Improvement		$250,000 Bldg. Design/Const. - Terry $75,000 Instructional Computer $3,000,000 Indust. Trng. Center: Wilmington $200,000 Minor Capital Improvement
FY87	$2,298,000	$1,750,000 Composit Manufacturing. Bldg. $100,000 Allison Hall planning/ engineering $125,000 Pike Creek Greenway $200,000 Addition to Penny Hall (Geol. Survey) $123,000 Addition to Research & Education Center (Georgetown)	$1,355,413	$150,000 Renovation: Lookerman Hall $100,000 Parking & Road Resurfacing $845,000 Renovation: Delaware Hall & Science Center $234,913 Minor Capital Improvements $25,500 Van: Handicapped	$1,032,400	$31,300 Terry - Computer $119,700 Stanton - Equipment $218,300 Wilmington - Equipment $24,600 Pres. Off. - Computer Equipment $125,000 Southern - Minor Capital Improvements $130,500 Terry - Equipment $125,000 Stanton - Access Road Repaving $198,000 Wilmington - Parking Lot Paving $30,000 Southern - Trades & Tech. Bldg. Planning $30,000 Southern - Museum Planning

Capital Authorization for Postsecondary Education FY76-FY89 (Continued)

Year	University of Delaware		Delaware State College		Delaware Technical & Community College	
FY88	$1,545,000	$1,300,000 Alison Hall Addition $45,000 Infrastructure $200,000 Athletic Facilities Study	$1,134,100	$850,000 Window/AC, Science Bldg. $22,000 Park Place, renovate $250,000 Minor Capital Improvements $12,000 Tubman Hall	$3,298,040	$1,000,000 N. Kent Vo-Tech., renovate $31,000 Instructional Computer, Terry $1,030,740 Bldg. Renovate, Stanton $11,000 Lighting, Southern $75,000 Roof, Terry $200,000 MCI & Equipment $700,000 Trades & Industry Bldg., Southern $250,000 Museum, Southern
FY89	$3,701,200	$1,250,000 Alison Hall Addition $2,000,000 Basketball Arena $250,000 Planning $145,000 Baseball Field Improve. $56,200 Irrigation Equipment	$1,445,000	$400,000 Minor Capital Improve. $200,000 Bookstore Addition $150,000 Wall Completion $200,000 Laws Hall Improve. $200,000 Exterior Renov. Ed./Hum. Bldg. $280,000 Library Expansion $15,000 Tubman Hall Furnace	$4,205,582	$1,000,000 Trades & Industry Bldg. $31,300 Instruc. Computer $325,000 MCI's & Equipment $199,132 Stripper Well Projects $1,900,000 Terry Lab Bldg. $250,000 Stanton HVAC $44,150 Southern Match Exxon $300,000 Wilm./Stanton Equip. $200,000 Higher Ed. Bldg., Planning
TOTALS:						
	$44,859,200		$15,822,513		$30,189,322	

During the fourteen year period since FY76, more than $90 million has been authorized by the State for higher education buildings, equipment and major renovation projects.

Capital requests and the funding granted seem to be based on unwritten assumptions which over the years have served in the absence of agreed-upon State policy. For example, it is generally understood that dormitory buildings and dining halls at the University of Delaware are not funded in the State's capital budget, yet such facilities are funded at Delaware State College. Similarly, it seems to have been assumed until recently that sports facilities at the University of Delaware were not funded through the State's capital budget. More ambiguous are understandings related to non-credit continuing education and industrial training. These are generally regarded as self-supporting activities, but buildings required to house these activities may or may not be included in the bond bill.

It seems generally understood that planning and design funds authorized in the capital budget are without doubt followed by construction funds. Requests for construction, therefore, need not be specific since planning and design functions have not been completed when the funding cycle is put in place.

Justification for facility requests take on a variety of form and substance in the State. No standard format or standard set of data about enrollment, space utilization, or other relevant items are required. Appeals for new construction can be made on the basis of State pride, economic development, geographic fairness, enrollment growth or the need for new programs. Any of these may represent a legitimate basis for approval, none represent an agreed upon continuing priority.

Considering the extent of public higher education's physical plant, consisting of 5 to 6 million square feet of space in about 140 buildings, on approximately 2,000 acres of land, it would

appear irresponsible to consider requests for new buildings in isolation from an overall facilities plan, especially when requests from the institutions are in competition with each other and with facilities requests from other agencies of the State.

It is recognized that the three public institutions in the State do plan for their space needs, each within their own system. In fact, the University of Delaware has recently hired a consulting firm to study its land holdings and space needs. It would be a waste of time and resources to attempt to duplicate an institution's planning process outside of the institutional setting. The process at the State level should be a more generalized planning process within which this institutional planning may take place.

The State process should allow for those legitimate differences which exist between institutions and which result in differing facilities requirements. A system which is based on a single, fixed criterion for each type of space for all types of institutions would be inappropriate. At the same time, the State cannot make reasonable and equitable decisions on competing requests if comparative data on facilities are not available. "The 1985 Report of the Task Force to Study Higher Education in Delaware" (a task force commissioned by the Council of Presidents of the State supported colleges) states that:

> "The task force could not make comparative assessments of the quantity or quality of space available to each institution because there are no common reports of space allocation or utilization. Each institution provided the task force with information about the number of assignable square feet it maintained in several categories of academic space, but there appear to be no discernable patterns among the institutions. We recommend that comparative reports of space allocations and utilization be developed." (p. 32)

The Delaware Postsecondary Education Commission, in the last five annual issues of this Data Book has recommended the following:

> "Specifically, the Commission recommends that the State undertake, with the assistance of educational facilities experts, a comprehensive facilities inventory and space utilization study to assess current and future facility needs.
>
> The cost of such a project, relative to the pattern of capital expenditures would be insignificant. The assistance rendered in making capital fund decisions would be extremely valuable." (1988, p. 30)

Many states have established facilities planning guidelines, but such guidelines cannot be adopted from other states. The facilities plan of any state must reflect the higher education goals and objectives and the unique array of institutional characteristics within the state's system of higher education. Activity and people create space needs, and inherent in any space planning system is the assumption of a rational means for determining the space requirements of the system as a whole and for individual institutions within the system based on appropriate activities to take place within the system.

The small size of Delaware's higher education establishment means that planning should be less difficult than in larger states, not less needed.

In recognition of this need, the Commission recommends that the State contract with an organization, or establish a task force of higher education facilities experts to:

1. Provide a complete survey of the physical plant assets of the three State supported institutions, reporting in standard format the gross and assignable areas of various categories of space (i.e., class, lab, office, etc.)

2. Provide an assessment of the condition of the facilities in the inventory.

3. Provide recommendations for maintaining the currency of the inventory.

4. Provide recommendations related to the need for new construction, demolition, renovation, and maintenance.

5. Provide guidelines for evaluation of future requests for new construction, renovation and maintenance.

At the same time, a second task force should be established to consider specific policy issues related to higher education facilities in the State of Delaware. For example, attention should be focused on questions such as whether research facilities should be funded by the State or by research contract overhead; whether dormitories, recreation facilities or only academic facilities should be funded; or whether priority should be attached to particular categories of buildings.

Further, it is recommended that methods of coordination be established between the process of approving operating budget requests and the process of approving capital requests.

Absent the perspective available through such studies, the Commission can provide only the following general priorities for evaluation of capital requests.

1. First priority should be given to projects aimed at eliminating health, safety or fire hazards, realizing that elimination of some hazards may take several years.

2. Second priority should be for projects which eliminate barriers to access for the handicaped.

3. Third priority should be for those projects which provide future operating cost avoidance (such as energy conservation, improved utility management or building maintenance).

4. Fourth priority should be given to projects which protect the institutions' physical plant assets through systematic building renewal (renovation and planned maintenance programs). Here, the Commission recommends that the State establish an ongoing planned maintenance and renovation fund based on some determined percentage of institutional plant assets. The institutions could then develop coherent long-range renovation plans which do not compete with new building requests.

5. Fifth priority should be for projects which remodel and/or alter existing structures where the cost is significantly less than new construction.

6. Sixth priority should be for projects to construct new facilities.

Both major remodeling and new structures should be evaluated on the basis of program needs and space utilization studies, as per the study proposed above.

Tuition

TUITION

Much attention has recently been focused on the rising cost of higher education. Most of this attention centers on tuition costs at a few highly selective colleges. What is not always reported is that less than 5% of all students attend the higher cost private institutions whose prices make the news. Another often-overlooked aspect of the college cost issue is the existence of financial aid which offsets some of the costs for approximately 60% of college students.

Even with a more realistic and temporate view of the college cost issue, it is understandably an issue of great concern to students and parents, and therefore an issue of interest and concern to policy makers. Tuition revenue is an important component in financing higher education. For independnt institutions, tuition normally comprises a larger portion of institutional revenue than at a public institution. At no institution, however, does tuition pay the entire cost of education. In addition to tuition revenue, public institutions derive support from state and/or local governments, while independent institutions receive more support from private philanthropy.

The setting of tuition and fee rates is important not only because of the impact it has on the institution's budget, but because it may also affect enrollment, and thus access. In the following section, tuition and fees of Delaware's colleges are presented in historical perspective. For the public institutions, comparisons are also made with other economic measures, and with peer institutions in the region, in order to more completely describe the educational marketplace within which these institutions operate.

A fifteen-year history of tuition and fee charges at Delaware's public and independent institutions is presented in Table 16 displayed graphically in Figure 3. The relationship

Table 16

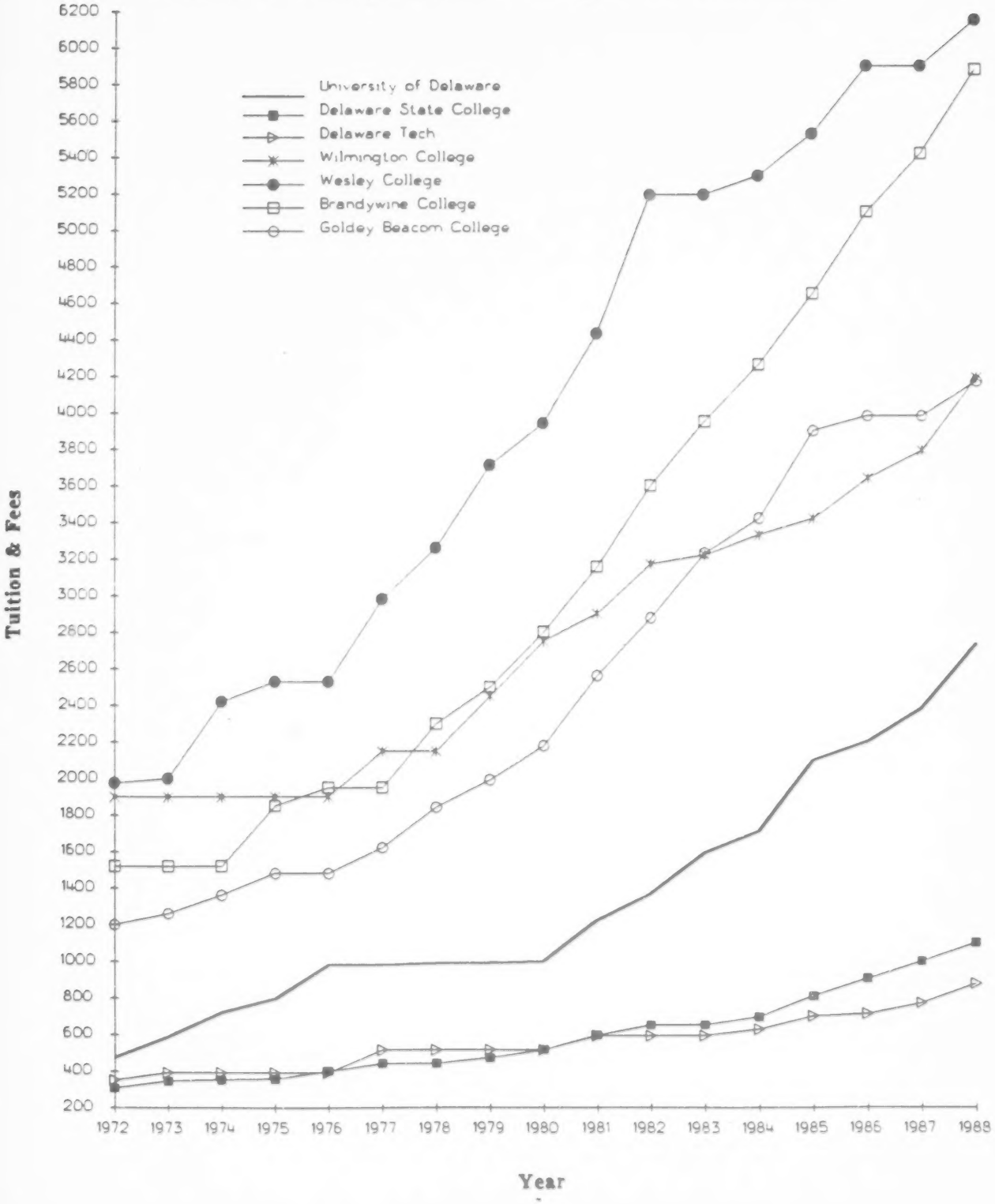
Tuition & Fee Charges Per Academic Year At Public & Independent Colleges in Delaware
1974 - 1989

	Public Colleges			Independent Colleges					
Year	Univ. of Delaware	Del. State College	DTCC	Wilm. College	Wesley College	Brandywine College	Goldey Beacom College	Ratio of Avg. Tuitions Independent To Public Colleges	Difference Between Avg. Public & Avg. Private T & F
1974-75	$720	$352	$390	$1,900	$2,420	$1,520	$1,360	3.7:1	$1,313
1975-76	$795	$356	$390	$1,900	$2,530	$1,850	$1,480	3.8:1	$1,426
1976-77	$978	$400	$390	$1,900	$2,530	$1,950	$1,480	3.3:1	$1,376
1977-78	$978	$440	$514	$2,150	$2,980	$1,950	$1,620	3.4:1	$1,531
1978-79	$988	$440	$514	$2,150	$3,260	$2,300	$1,840	2.7:1	$1,741
1979-80	$990	$470	$514	$2,450	$3,710	$2,500	$1,990	4.0:1	$2,005
1980-81	$998	$515	$514	$2,750	$3,940	$2,800	$2,176	4.3:1	$2,241
1981-82	$1,222	$595	$591	$2,900	$4,430	$3,155	$2,560	4.1:1	$2,458
1982-83	$1,367	$650	$591	$3,170	$5,190	$3,600	$2,876	4.3:1	$2,840
1983-84	$1,590	$650	$591	$3,220	$5,190	$3,950	$3,228	4.1:1	$2,953
1984-85	$1,710	$695	$627	$3,330	$5,294	$4,260	$3,420	4.0:1	$3,065
1985-86	$2,100	$810	$699	$3,420	$5,524	$4,650	$3,900	3.6:1	$3,171
1986-87	$2,205	$906	$714	$3,640	$5,900	$5,100	$3,900	3.7:1	$3,380
1987-88	$2,385	$1,000	$771	$3,790	$5,900	$5,420	$3,900	3.4:1	$3,368
1988-89	$2,738	$1,100	$876	$4,190	$6,150	$5,880	$4,170	3.2:1	$3,527

*Charges listed reflect the institutions' "full-time" tuition. When no set full-time tuition is established, 15 credit hours per term is used.

Figure 3

Tuition & Fee Charges per Academic Year at Public & Independent Colleges in Delaware



between tuition in the public and independent sectors was relatively stable between 1979-80 and 1984-85. For the last four years, the ratio has been slightly more volatile. All except two institutions have experienced fairly rapid increases in tuition costs. The increases in the independent colleges began in 1976. Increases at the University of Delaware began to accelerate in 1981. Delaware State College's and Delaware Tech's increases have been steady, but not dramatic.

During the fifteen-year period presented here, the gap between tuition and fees at public colleges and those at independent colleges has increased from $1,313 to $3,527 (168.6%).

Table 17 compares tuition and fee charges since 1976 with three measures of the cost of living, indexed to 1972. In comparing tuition increases with increases in the Consumer Price Index, Higher Education Price Index, and the Delaware Household Disposable Income, only two colleges (Delaware Tech and Wilmington College) have increased at a rate which is less than inflation as measured by the CPI and HEPI.

As a measure of the relative affordability of college for Delaware families, the DHDI is an important index. Four of Delaware's seven institutions have increased costs at a rate greater than DHDI increases since 1972. At these institutions (University of Delaware, Delaware State College, Brandywine College, and Goldey Beacom College) higher education is relatively more expensive than it was in 1972 for Delaware families. In itself this is not necessarily a negative finding, since the proportion of family income which is expended for any number of basic household needs and/or luxuries has undoubtedly been altered during the same period of time.

The trend for college costs to outpace inflation is national, has been steady for over a decade, and most experts predict that it will continue into the foreseeable future.

Table 17

Tuition & Fees vs. Economic Parameters

The public and independent colleges are compared using index numbers of tuition cost. The Consumer Price Index, Delaware Household Disposable Income, and the Higher Education Price Index are provided for comparison. In all cases the base year is 1972.

Year	Univ.of Delaware	Del.St. College	Delaware Tech.	Wilmington College	Wesley College	Brandywine College	Goldey Beacom College
1976-77	205	130	111	100	128	128	123
1977-78	205	143	146	113	150	128	135
1978-79	208	143	146	113	165	151	153
1979-80	208	153	146	129	187	164	165
1980-81	210	167	146	145	199	184	181
1981-82	257	194	169	153	224	208	213
1982-83	288	212	169	169	263	237	240
1983-84	335	212	169	169	263	260	269
1984-85	360	226	179	175	268	280	285
1985-86	442	264	200	180	280	306	325
1986-87	464	298	204	192	299	336	325
1987-88	502	326	220	200	299	357	325
1988-89	576	358	250	221	312	384	348

	Consumer Price Index[1]	Del. Household Disposable Income[2]	Higher Education Price Index[3]
1975-76	135	134	130.5
1976-77	142	139	138.9
1977-78	152	150	148.2
1978-79	166	162	159.8
1979-80	189	177	175.5
1980-81	211	184	194.3
1981-82	223	205	213.6
1982-83	238	216	227.4
1983-84	241	237	239.7
1984-85	244	254	251.7
1985-86	262	274	255.8
1986-87	264	285	266.5
1987-88	281	295	278.1
1988-89	294	312	290.3

[1]Bureau of Labor Statistics; January figure used for each year.
[2]From a series published by Sales & Marketing Management; a calculation of effective buying income.
[3]From Research Associates of Washington.

The U. S. Department of Education has attributed rapidly rising tuitions to college inefficiency and reliance on the availability of financial aid to help students meet their costs. Colleges have stressed the labor intensive nature of college education as a primary reason for tuition increases. Independent analysts have attributed the increases to substantial cost increases in non-academic operations, including institutional marketing costs, administrative salaries, student services, and student recruitment devices such as non-need-based merit scholarships. Whatever the underlying reasons for the comparatively greater cost of college over the past decade, Delaware's trends mirror the national situation.

Delaware families do not limit their college attendance decision to institutions located within the State. To provide some perspective, at least with respect to tuition and fee levels at peer institutions in nearby states, Table 18 presents a six-year history of in-state tuition and fees, and current-year non-resident tuition and fees.

Annual increases in state resident tuition and fees at state-supported universities ranged from 8.2% to 14.8% (average 9.9%). The 14.8% increase at the University of Delaware was the highest. The University ranks fifth out of the seven selected institutions on tuition charges (ranked high to low). The University of Maryland and the University of Virginia have lower tuition and fees. The University of Delaware increased its charges to non-residents 11.7% compared with the average for state-supported universities of 9.5%.

Delaware State College is compared with both four-year state colleges in this region and with 1890 Land Grant Colleges. Annual tuition and fee increases for four-year state colleges ranged from 5.7% to 24.6% (average 8.1%). Delaware State College's charges increased 10%. Even with this increase, Delaware State College remains the least expensive of the selected four-year colleges. It ranks ninth of the thirteen 1890 Land Grant Colleges

Table 18

Annual Tuition and Fees Comparison
Public Institutions in Adjacent States & Other Peer Institutions

State-Supported Universities	Resident Tuition and Fees						Out-of-State
	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89	1988-89
Penn State	2,312	2,562	2,760	2,996	3,292	3,610	7,248
Temple	2,752	2,890	3,092	3,350	3,564	3,894	6,802
U. Pittsburgh	2,680	2,940	3,010	3,220	3,486	3,836	7,516
Rutgers	1,854	1,867	2,120	2,246	2,535	2,743	5,023
U. Maryland	1,332	1,410	1,496	1,601	1,740	1,896	5,282
U. Virginia	1,570	1,846	2,040	2,250	2,350	2,550	6,350
U. DELAWARE	1,590	1,710	2,100	2,205	2,385	2,738	6,478
State Colleges (4-Year)							
West Chester Univ.(PA)	1,480	1,570	1,731	1,811	1,985	2,250	3,672
Lincoln Univ. (PA)	1,730	1,830	2,089	2,130	2,130	2,400	3,500
Cheyney State (PA)	1,480	1,730	1,775	1,880	2,030	2,340	3,702
Montclair State (NJ)	1,260	1,320	1,435	1,538	1,645	1,875	2,595
Glassboro State (NJ)	1,038	1,046	1,120	1,216	1,350	1,579	2,179
Kean College (NJ)	900	1,328	1,395	1,485	1,552	1,792	2,483
Salisbury State (MD)	1,354	1,472	1,656	1,886	1,996	2,110	3,578
Towson State (MD)	1,322	1,403	1,514	1,609	1,734	1,902	3,370
Morgan State (MD)	1,281	1,372	1,497	1,544	1,648	1,778	3,544
Virginia State	1,430	1,455	1,800	1,800	2,349	2,926	4,890
U. of MD Eastern Shore	1,128	1,252	1,350	1,502	1,684	1,800	5,160
DELAWARE STATE	650	695	810	906	1,000	1,100	2,550
1890 Land-Grant Colleges							
Alabama A & M Univ.	800	880	980	980	1,134	1,134	2,026
Ft. Valley St.Coll.(GA)	990	1,101	1,230	1,326	1,404	1,467	3,756
Kentucky State Univ.	826	880	936	992	1,120	1,160	3,240
Southern Univ. (LA)	550	662	762	1,124	1,130	1,364	2,881
Alcorn State (MS)	875	975	1,150	1,550	1,550	1,550	2,732
Lincoln Univ. (MO)	600	700	806	1,200	1,200	1,200	2,400
N. Carolina A & T	866	888	938	938	989	999	4,837
Langston Univ. (OK)	453	479	629	656	809	855	1,438
S. Carolina State	900	1,050	1,150	1,200	1,450	1,450	2,980
Texas Southern	532	532	N/A	480	870	870	3,228
Prairie View A & M (TX)	366	473	720	887	887	887	3,204
Tennessee State Univ.	792	878	954	1,076	1,148	1,202	3,938
DELAWARE STATE	650	695	810	906	1,000	1,100	2,550

Table 18 (Continued)

Community Colleges	Resident Tuition and Fees						Out-of-State
	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89	1988-89
Bucks County Comm. College (PA)[1]	1,078	1,144	1,144	1,144	1,248	1,256	3,720
Delaware County Comm. College (PA)[2]	726	750	846	894	966	1,014	3,222
Community College of Philadelphia (PA)[3]	966	966	1,032	1,104	1,210	1,288	2,536
Camden County College (NJ)	570	630	754	814	902	1,044	1,116
Mercer County Comm. College (NJ)[1]	690	750	780	840	890	890	2,790
Middlesex County Comm. College (NJ)[1]	730	750	750	780	976	1,114	1,522
Salem Community Coll. (NJ)[1]	730	750	874	1,025	1,078	1,080	1,488
Chesapeake College (MD)[4]	509	549	549	602	667	828	3,392
Wor-Wic Tech. Comm. College (MD)[1]	504	538	561	612	660	708	3,372
Cecil Community Coll. (MD)[1]	540	675	735	795	880	930	2,670
DELAWARE TECHNICAL & COMMUNITY COLLEGE	591	627	699	714	771	876	2,091

Source: College admissions offices.

*The funding of community colleges often includes support from counties, cities, school districts, or other municipal governments. The "resident" tuition and fees given here are the lowest tuition and fees charged for any category of student. The following footnotes specify for each college which residence category qualifies for the tuition and fee charges given here.

1 county resident
2 resident of sponsoring school district
3 city resident
4 resident of five-county area

(from high to low). One-year tuition increases in the 1890 Land Grant schools averaged 4.1%, compared with Delaware State College's 10%. Delaware State College's non-resident charges increased by 10.9%, resulting in a rank of eleventh of twelve (from high to low) in charges to non-residents among the four-year colleges, and tenth of thirteen among the 1890 Land Grant Colleges.

Annual increases in tuition and fees to in-state students at eleven community colleges ranged from 0.2% to 24.1% (average 7.8%). Delaware Technical & Community College's (DTCC) in-state charges increased by 13.6%. Among its peer institutions, DTCC moved from tenth to ninth in resident charges (ranked high to low) between 1987-88 and 1988-89. DTCC increased its out-of-state tuition and fees by 9.8%.

While there is no State policy in Delaware pertaining to tuition charges at public colleges and there are no guidelines, an indirect relationship does exist in terms of budget requests and appropriations, where the issue of tuition increases serves as a catalyst.

To put this into a somewhat broader financial perspective, Table 19 compares state resident tuition charges with per student expenditures for the three public institutions. It should be pointed out that since both Delaware State College and the University of Delaware have significant percentages of non-state-resident students, the percentage that tuition constitutes of total Education and General Expenditures* is under-represented by resident tuition charges alone. Total tuition and fees collected (for both in-state and out-of-state residents) is a larger percentage of expenditures than is reflected in Table 19 (see Table 20 for total tuition and total expenditures) for these two institutions. However, it is nonetheless instructive to examine the relationship between total expenditures per student and in-state tuition charges. University of Delaware tuition

*Total Education and General Expenditures is total expenditures of the institution less debt service and auxiliary enterprises.

Table 19

In-State Tuition & Fees at Public Institutions
As A Percentage of Education & General
Expenditures[1] per FTE Student[2]

Fiscal/Academic Year	Education & General Expenditures per FTE Student	Tuition & Fees	T&F/E&G (%)
1988			
UD	13,322	2,738	20.6
DSC	10,637	1,100	10.3
DTCC	5,624	876	15.6
1987			
UD	12,141	2,385	19.6
DSC	11,649	1,000	8.6
DTCC	6,383	771	12.1
1986			
UD	10,990	2,100	19.1
DSC	12,164	810	6.7
DTCC	6,130	699	11.4
1985			
UD	9,600	1,710	17.8
DSC	9,808	695	7.1
DTCC	5,607	627	11.2
1984			
UD	9,117	1,590	17.4
DSC	9,668	650	6.7
DTCC	5,055	591	11.7
1983			
UD	8,654	1,367	15.8
DSC	8,553	650	7.6
DTCC	5,005	591	11.8

[1]Education & General Expenditures is total expenditures of an institution less debt service and auxiliary enterprises.

[2]FTE student is full-time enrollment plus one-third of part-time enrollment.

Table 20

Total Tuition Revenue As A Percentage Of
Total Education & General Expenditures[1]
For Public Institutions

Fiscal/Academic	Education & General Expenditures	Tuition & Fees	T&F/E&G (%)
1988			
UD	214,179,345	78,270,969	36.5
DSC	21,412,871	3,157,191	14.7
DTCC	31,335,200	5,162,458	16.5
1987			
UD	189,140,092	68,892,267	36.4
DSC	21,563,861	2,846,766	13.2
DTCC	30,151,600	4,336,800	14.3
1986			
UD	162,628,541	61,567,335	37.9
DSC	19,926,531	2,555,373	12.8
DTCC	23,734,679	2,180,850	9.2
1985			
UD	144,494,086	52,759,924	36.5
DSC	18,154,682	2,271,614	12.5
DTCC	21,895,275	1,992,231	9.1
1984			
UD	132,618,960	46,965,307	35.4
DSC	16,141,469	2,023,110	12.5
DTCC	20,051,152	2,079,926	10.4
1983			
UD	126,371,487	41,322,396	32.7
DSC	13,744,606	2,051,311	14.9
DTCC	20,564,715	2,025,544	9.8

[1]Education & General Expenditures is total expenditures of an institution less debt service and auxiliary enterprises.

charges are 20.6% of per student expenditures, while Delaware State College's charges are 10.3% of per student expenditures. Delaware Technical and Community College charges are 15.6% of per student expenditures.

Perhaps for state level financial management purposes, a more relevant examination of tuition revenue is the relationship between total Education and General Expenditures and total tuition revenues collected from all students (Table 20). The most significant change in the relationship between these totals for any of the three institutions during the last year is at DTCC. The relationship between tuition and fees and education and general expenditures at DTCC, which had remained remarkably consistent from 1983 - 1986, has increased by 80% during the last two years (from 9.2 - 16.5%).* Since 1982, tuition and fees at the University of Delaware have increased as a percentage of education and general expenditures, reflecting both recent increases in tuition and an increasing number of non-state-resident students. The relationship at Delaware State College has been fairly constant over the last six years. The proportion of total expenditures supported by tuition at the University of Delaware is much greater than at the other two colleges.

In states where tuition policies exist, most (16 of 20) indicate that tuition is indexed to the cost of education. The outcome of indexing tuition charges to actual cost of education has the advantage of efficiency and predictability, because tuition then increases at a rate directly proportional to the rise in total cost of providing education at an institution. Once the index is established, the setting of tuition levels is removed as a point of controversy in the annual budget process.

*This increase is due to statutory changes resulting in Delaware Tech's retaining certain tuition payments which were previously deposited in the State General Fund.

Faculty Salaries

FACULTY SALARIES

The strength of the faculty directly influences the quality of academic programs and the reputation of colleges and universities. The development of a strong faculty is a long-term process involving appropriate recruiting strategies, incentives for development of existing faculty and effective allocation of faculty time to institutional missions. The financial resources available to an institution for faculty salaries, though not the sole ingredient, play a very significant part in this long-term building process. A short-term lapse of attention to faculty salaries can have disastrous effects on this process.

Decisions related to the level of State salary increases for FY90 will be made over the next several months, and will directly affect, to varying degrees among institutions, faculty salaries.

With these decisions in mind, the Commission includes the following national data which should be of general use in addressing the issue.

The data presented were processed, tabulated and analyzed for the American Association of University Professors by Mayse Eymonerie Associates.* All salaries are converted to reflect full-time nine-month positions and do not include fringe benefits. All salaries presented are for the 1987-88 academic year. Current year salary increases may have altered the relative standings shown. Nationally faculty salaries increased 4.9% from 1986-87 to 1987-88, down from the previous year's increase of 5.9%.

In Delaware, during this same period University of Delaware faculty salary increases ranged from 6.5% to 7.9% (differences among ranks), Delaware State increases ranged from 3.0% to 3.5% and DTCC average salary increased 5.1%.

*"The Annual Report of the Economic Status of the Profession 1987-88" ACADEME, March-April 1988.

The data presented in Tables 21 to 23 are separated into institutional categories using the American Association of University Professors (AAUP) system which identifies institutions in Categories I-IV, as follows:

Category I — University Level: institutions that offer the doctorate, and the most recent three years conferred an average of 15 or more doctorates in at least three disciplines.

Category IIA — College Level: institutions that award degrees above the bachelor's degree but do not qualify for Category I.*

Category III — Two-year College Level.

Category IV — Institutions without ranks.

Table 21 presents average salaries at Category I, IIA, III and IV institutions at five percentile ranking points. The average salaries by rank of comparable Delaware institutions are listed on the right with arrows indicating their relative percentile positions. While DTCC is assigned to Category IV because it does not use faculty rank, Category III is also included here because community colleges in Pennsylvania, New Jersey and Maryland do use academic rank and are classified in Category III. Many community colleges in other states are classified, like DTCC, as Category IV.

For a regional comparison the three Delaware institutions are compared with peer groups of nearby institutions. The institutions used in Table 22 are the institutions that the Commission has traditionally used for tuition comparison purposes. All of the UD comparison institutions are Category I universities. Delaware State is compared to state colleges which are classified as Category IIA. These institutions offer academic degrees beyond the Bachelor's in several fields - in most cases Master's degrees. The community colleges in neighboring states are classified as Category III institutions because they maintain academic ranks.

*In previous issues of the Data Book, Delaware State College was classified as Category IiB. The addition of several graduate programs moves it to Category IIA status.

Delaware Tech., like community colleges in many other states, is classified as Category IV, using no academic ranking.

Table 21

Average 9-Month 1987-88 Salaries by AAUP Category, By Rank at Four National Percentile Points (in thousands)

Percentile	95	80	60	40	20	
Category I						UD
Professor	$64.3	$58.1	$53.1	$49.0	$44.6	$53.1
Associate	44.2	41.0	39.0	37.2	34.0	37.8
Assistant	36.4	34.2	32.4	30.9	29.4	30.3
Instructor	32.3	27.2	25.0	23.3	21.0	21.6
Category IIA						DSC
Professor	52.2	46.8	42.7	39.2	35.4	40.0
Associate	41.4	37.7	34.8	32.4	29.9	31.8
Assistant	33.9	31.3	29.2	27.4	25.4	27.6
Instructor	28.7	25.7	23.5	22.0	20.4	21.7
Category III						
Professor	43.8	40.5	36.9	34.1	30.3	
Associate	40.2	34.8	32.0	29.4	26.6	
Assistant	35.0	28.9	27.1	25.1	22.9	
Instructor	30.4	25.1	23.1	21.9	19.1	
Category IV						
No Rank	36.3	31.5	27.8	24.9	22.5	30.7**

**Southern Campus - 30.7, Terry - 30.0, Wilmington/Stanton - 31.5

Table 22

Comparative 9-Month Average Salaries By Rank For 1987-88 At Public Institutions In Neighboring States (in thousands)

State Supported Universities	AAUP Categ.	Prof.	Assoc.	Asst.	Instr.	Weighted Avg.
Penn State U	I	$54.2	$39.1	$32.3	$20.4	$40.0
Temple U	I	48.3	38.0	31.8	26.6	40.4
U Pittsburgh	I	54.2	39.0	30.9	21.5	41.1
Rutgers U	I	61.6	44.1	34.5	25.1	47.2
U Maryland	I	55.8	39.9	32.7	24.0	42.5
U Virginia	I	62.6	42.1	33.7	24.5	47.9
U DELAWARE	I	53.1	37.8	30.3	21.6	39.0
State Colleges						
Cheyney University	IIA	45.5	37.1	28.8	23.4	37.9
Montclair State	IIA	49.9	41.2	33.1	-	41.3
Salisbury State	IIA	42.7	33.9	28.4	24.2	33.4
Towson State	IIA	43.5	37.0	30.5	23.4	34.8
Morgan State	IIA	46.4	37.3	31.4	25.7	35.9
Virginia State	IIA	39.0	35.2	30.7	25.9	33.2
UMD Eastern Shore	IIA	-	38.7	34.6	29.3	32.8
DELAWARE STATE	IIA	40.0	31.8	27.6	21.7	29.4
Community Colleges						
Cecil Community College	III	36.3	33.6	28.5	19.8	28.6
WOR-WIC Tech. (MD)	III	-	-	27.8	23.5	28.0
Salem Community College	III	*	*	*	*	*
CC of Baltimore	III	35.8	29.7	26.3	22.0	29.0
Camden Co. College	III	*	*	*	*	*
Mercer Co. CC	III	*	*	*	*	*
Delaware Co. CC	III	*	*	*	*	*
Chesapeake College (MD)	III	-	29.6	25.4	21.0	26.6
DTCC						
Southern	IV				30.7	30.7
Stanton/Wilmington	IV				31.5	31.5
Terry	IV				30.0	30.0

*Salaries for these colleges are not listed in the 1987-88 AAUP report. Evidently these institutions did not complete the AAUP form MEA22.

Table 23

National Average 9-Month Salaries,
By Rank and Institutional Category For
Public Institutions, 1987-88 (in thousands)

Category I	Avg. Public	University of Delaware
Professor	$51.1	$53.1
Associate	37.3	37.8
Assistant	31.5	30.3
Instructor	22.2	21.6
All Ranks	40.9	39.0
Category IIA		**Delaware State College**
Professor	$46.1	$40.0
Associate	34.7	31.8
Assistant	28.4	27.6
Instructor	21.8	21.7
All Ranks	35.3	29.4
Category III		**DE Tech. & Comm. Coll.**
Professor	$38.2	-
Associate	32.2	-
Assistant	27.3	-
Instructor	23.2	-
All Ranks	31.1	30.7
Category IV	29.1	30.7

Table 23 compares average 9-month salaries for all public institutions, by AAUP category, with salaries at the three Delaware institutions.

The average salary figures are subject to a number of factors, especially in a small institutions. They do not necessarily reflect an official salary scale. Higher than normal longevity of current faculty in a certain rank, or heavy faculty turnover in a given year, for example, might distort the average for that particular rank.

It should be clear from the data in Tables 21 to 23 that faculty salaries at the three public institutions in Delaware are not among the highest in the nation or the region. When compared to national average salaries for public peer institutions, the University of Delaware (with all ranks combined) is about 4% below average. Delaware State College salaries compared to public Category IIA institutions is 17% below average. Delaware Tech is 5% above the average public Category IV institution and 1% below the average public Category III institutions.

When the University of Delaware and Delaware State College salaries are compared to similar institutions in the region they are consistently low across faculty ranks.

In presenting "national average salaries" the Commission recognizes the ultimate incompatibility of paying mediocre salaries and aspiring to a better than mediocre system of higher education. The Commission, therefore, does not recommend the national averages as targets for Delaware institutions. Current salaries (1987-88), however, fall short of even such minimal aspirations.

State Funded Student Assistance Programs

STATE FUNDED STUDENT ASSISTANCE PROGRAMS

During the past nine years (FY81-FY89) State funding directed to student financial aid, in the form of scholarships and grants has increased 156% - from 2.4 million to 6.2 million. This increase outpaced increases in the CPI, increases in tuition at Delaware colleges, and increases in overall State funding per FTE. As impressive as this effort may seem, financial aid funding remains inadequate in meeting the financial need demonstrated by Delawareans. This is evidenced by the requests for an additional $1.3 million in financial aid for the next fiscal year. In comparisons with other states' efforts in this area, Delaware does not compare favorably, particularly in comparisons with other high-tuition states.

Because the State's $6.2 million financial aid appropriation makes up only a part of the $47 million scholarship, aid, and loan portfolio of the seven Delaware colleges, the significant state increases in financial aid funding have not been sufficient to make up for the double impact of tuition increases and federal cut-backs in financial aid. The eligibility of middle class families for federal assistance has been systematically reduced during the past few years primarily through new limitations on federally guaranteed loans.

In addition to issues related to overall financial aid funding, there are several policy questions which arise from the distribution pattern among institutions and agencies and among lines within institutional budgets. In 1969, the Academy for Educational Development, in a comprehensive study of higher education in Delaware, commented that the financial aid programs "resemble a patchwork quilt, consisting of a series of separate decisions made over the years to problems as they arose". In 1986 the Task Force to Study Higher Education in Delaware noted that "Delaware student financial aid programs may have become so specialized as to be incoherent in the aggregate". At that

time Delaware appropriated funding for 17 separate financial aid programs; today there are twenty-two.

At the end of 1986 the Governor requested that the Postsecondary Education Commission and the Council of Presidents of the State supported colleges review the State's student aid programs and prepare recommendations. The Commission, with the consent of the Council, appointed an ad hoc committee of financial aid officers and other officials from all Delaware colleges to gather data for this purpose. The committee's report was completed in 1988. On the basis of the data contained in that report, the Commission concluded that there was no sound rationale for the current pattern of funding and that the State should view financial aid funding as an important public policy issue rather than dealing with it in a piecemeal fashion across institutional budgets.

The Postsecondary Education Commission has consistently recommended that the State commit itself to a student-based distribution of financial aid by providing additional funds to the State's centralized grant program - the Delaware Postsecondary Scholarship Fund. The value of this recommendation is in having the additional funding availablae to all Delaware residents who need assistance, regardless of their college choice. Such a policy would preclude the need to guess about the relative need of Delaware students at one institution compared to another, and would distribute financial aid on the basis of individual student need rather than institutional budget priorities or political clout.

An historical perspective on the pattern of financial aid funding since 1972 and requests submitted for FY90 is presented on the following page, Table 24.

Table 24

DELAWARE SCHOLARSHIP/FINANCIAL AID FUNDING SINCE 1972*

FY	1972	1975	1978	1981	1984	1987	1988	1989	1990 Request**
University of Delaware									
General Scholarships	273.0	909.0	1,024.0	1,024.0	1,024.0	1,224.0	1,224.0	1,224.0	1,324.0
Teacher Scholarships (Summer)	50.0	50.0	-	-	75.0	104.5	172.9	178.1	247.4
Scholarships	100.0	150.0	150.0	300.0	350.0	825.0	885.0	973.0	1,050.0
Aid to Needy Students	57.0	57.0	542.0	542.0	542.0	542.0	642.0	642.0	742.0
Academic Incentive Fund	-	-	-	50.0	50.0	100.0	100.0	100.0	100.0
Title VI - Scholarships	-	-	-	-	172.2	673.2	750.2	800.3	900.0
Student Employment Program	-	-	-	-	-	156.8	156.8	156.8	156.8
Carvel Scholarships	-	-	-	-	-	150.0	200.0	200.0	200.0
TOTAL UD	480.0	1,166.0	1,716.0	1,916.0	2,213.2	3,775.5	4,130.9	4,274.2	4,720.2
Delaware Technical & Community College									
Aid to Needy Students	-	25.0	25.0	44.0	48.3	112.2	137.2	158.7	238.7
Academic Incentive Funds	-	-	-	25.0	25.0	50.0	50.0	50.0	50.0
NDSL Match	-	-	-	-	-	4.5	7.5	7.6	7.6
TOTAL DTCC	-	25.0	25.0	69.0	73.3	166.7	194.7	216.3	296.3
Delaware State College									
Scholarships	50.0	50.0	56.0	56.0	56.0	86.0	86.0	86.0	150.6
Academic Incentive Funds	-	-	-	25.0	25.0	50.0	50.0	50.0	50.0
Title VI Scholarships	-	-	-	-	87.5	120.0	120.0	120.0	160.0
Athletic Grant	-	-	-	-	-	73.1	83.1	83.1	83.1
Teacher Scholarships (Summer)	-	-	-	-	18.0	36.0	36.0	36.0	36.0
Mishoe Scholarships	-	-	-	-	-	-	50.0	50.0	50.0
Grad. Fellowships	-	-	-	-	-	-	-	-	50.0
Scholarships (Need)	-	-	-	-	-	-	-	-	302.5
TOTAL DSC	50.0	50.0	56.0	81.0	186.5	365.1	425.1	425.1	882.2
Education Commission									
Scholarship Fund	150.0	150.0	350.0	350.0	375.0	706.5	711.3	825.0	1,025.0
Merit-Based Scholarships	-	-	-	-	-	200.0	200.0	200.0	200.0
Christa McAuliffe - Teacher	-	-	-	-	-	50.0	100.0	150.0	200.0
Nursing Incentive	-	-	-	-	-	-	50.0	100.0	150.0
TOTAL DPEC	150.0	150.0	350.0	350.0	375.0	956.5	1,061.3	1,275.0	1,575.0
STATE TOTAL	680.0	1,391.0	2,147.0	2,416.0	2,848.2	5,263.8	5,812.0	6,190.6	7,473.7

*Amounts do not include funds appropriated directly or indirectly as matching funds for the Federal College Work-Study Program.

**Amounts reflect highest budget level request.

State Support to Delaware Residents Who Must Purchase Their Education in Other States

STATE SUPPORT TO DELAWARE RESIDENTS WHO MUST PURCHASE THEIR EDUCATION IN OTHER STATES

The State of Delaware has for many years recognized the limitations imposed by its population size and financial resources in offering the variety of specialized higher education opportunities needed by its citizens. Action of the General Assembly in 1953 in creating the "Higher Education Scholarship" program is evidence of the State's long-standing concern in this regard. That program (now part of the broader Delaware Postsecondary Scholarship Fund) provides a source of financial assistance for students studying at colleges in programs not available at Delaware's tax-supported colleges.

In a similar (though more complex) vein, the Delaware Institute for Medical Education and Research (DIMER) was established in 1969. One part of this program guarantees medical education slots for qualified Delaware residents at Jefferson Medical College. Another part provides scholarship assistance to these students, and a third section provides funding for medical education programs of the Wilmington Medical Center and Health Sciences at the University of Delaware.

Following DIMER, two other programs were established to guarantee places for qualified Delaware residents in professional schools. The Delaware Institute for Veterinary Medical Education (DIVME) provides for the purchase of positions in the colleges of veterinary medicine at the University of Pennsylvania and at Cornell University. The Optometric Institutional Aid program is a contractual arrangement with the Pennsylvania College of Optometry to provide space for qualified Delaware students.

Finally, in 1980 the Delaware Institute of Dental Education and Research was created by the 130th General Assembly. The FY89 State Budget included funds to provide for payment of three dental internships. This program differs from the other described in this section, in that, to date, funding for education outside the State has not been established. Such funding, however, would be permissible under the program.

Table 25

Summary of State Support to Students Enrolled in Programs of Study Outside the State of Delaware*

	FY79	FY81	FY83	FY85	FY87	FY88	FY89	FY90 Request**
DIMER								
Contract Positions -	$800.0	$950.0	$1,047.4					
Scholarships	$ 50.0	$100.0	$ 105.0	$ 157.0	$ 190.0	$ 231.5	$ 231.5	$ 295.0
Operations			$ 210.0					
TOTAL	$850.0	$1,050.0	$1,362.4	$1,488.4	$1,643.0	$1,708.7	$1,708.7	$1,785.6
Note: Students pay regular Jefferson tuition								
DIVME								
Contract Positions - Students repay 25% of contract costs and pay regular tuition	$ 36.0	$ 105.0	$ 164.0	$ 155.0	$ 148.0	$ 179.0	$ 146.5	$ 165.5
DIDER								
Dental Intern Positions				$ 40.0	$ 91.7	$ 93.5	$ 93.5	$ 97.7
Optometric Institutional Aid								
Contract Positions - Students repay 25% of contract cost and are required to practice in Delaware. Tuition is reduced by the amount of the contract ($4,000)	$ 16.0	$ 36.0	$ 28.0	$ 16.0	$ 28.0	$ 20.0	$ 28.0	$ 28.0
Other Out-Of-State Grants*								
Grants range from $200 to $1,000 Major categories of fields of study are: Architecture, Audiology, Dentistry, Forestry, Journalism, Law, Medicine, Pharmacy	$200.0	$ 210.0	$ 250.0	$ 186.7	$ 127.1	$ 153.8	165.0	165.0

*Those scholarships (need-based grants) awarded to students attending college in other states in programs not provided at Delaware's tax-assisted colleges. These grants are part of the larger Delaware Postsecondary Scholarship Fund.

**Amounts reflect highest budget level request.

Delaware College Enrollment

DELAWARE COLLEGE ENROLLMENT

Delaware's college headcount enrollment for the fall of 1988 reached an all-time high of 38,240 students. The headcount (total of full- and part-time students) for the fall of 1988 increased 5.8% from that of 1987. The 1987 headcount, in turn, represented a 2.9% increase over the fall of 1986.

Full-Time Equivalent (FTE) enrollment (calculated as full-time students plus one-third of part-time students) increased by 1,371 FTE or 5.1% from the previous year, reflecting an increase in both full-time and part-time students.

The part-time student increase was slightly larger than the full-time student increase (1110 and 996 respectively), which increased the percentage of part-time students in the college population from 38.6% in 1987 to 39.4% in 1988.

The Commission has charted college enrollment figures over the past thirteen years, and based on high school graduation figures, projected a no-growth situation. This year's increase adds over two-thousand students to the college population. This has occurred while the number of high school graduates in Delaware has declined. The 1988 increase was shared by every college in the State with the exception of Widener (which moved a large program from its Delaware campus to Pennsylvania).

Much of the headcount increase during the past several years has been accounted for by the part-time student count. Figure 3 depicts changes in part-time and full-time enrollment from 1980 to 1988.

Comparing headcount enrollment of 1980 to that of 1987 results in an increase of 2,399 students (7.1% increase). Ninety-seven percent (2,329 students) of that increase is accounted

Table 26

Headcount (full-time plus part-time) Enrollment In Degree, Diploma & Certificate Programs for Delaware Colleges
Fall 1975 - Fall 1988

Fall of	UD	DSC	DTCC	DTCC-UD Parallel Program	Wesley	Goldey Beacom	Wilmington	Widener University Delaware Campus	Widener University Delaware Law School	Total
1975	19,080	2,174	6,269	*	Data collected for these years was aggregate data for "all independent colleges"					32,830
1976	19,035	2,167	5,501	*						31,505
1977	19,018	2,128	5,095	*						30,960
1978	18,795	2,129	5,523	*	1,127	1,460	767	1,120	742	31,663
1979	18,731	2,051	6,209	266	1,267	1,490	740	1,288	757	32,799
1980	18,841	2,083	6,679	309	1,316	1,662	782	1,299	764	33,735
1981	18,241	2,128	7,030	376	1,322	1,802	985	1,928	813	34,625
1982	18,231	2,151	7,164	384	1,194	1,863	877	1,579	864	34,307
1983	17,859	2,113	7,177	374	1,148	1,993	1,213	2,106	864	34,847
1984	17,714	2,209	7,001	369	1,472	1,918	1,060	1,936	885	34,564
1985	17,754	2,290	7,073	408	1,083	1,896	971	1,831	910	34,216
1986	18,203	2,327	7,508	428	1,044	1,840	1,227	1,612	932	35,121
1987	18,551	2,389	7,675	516	1,086	1,785	1,453	1,637	1,042	36,134
1988	19,212	2,510	9,082	606	1,187	1,827	1,482	1,154	1,180	38,240
% of Total Enrollment 1988	50.2%	6.6%	23.7%	1.6%	3.1%	4.8%	3.9%	6.1%		100%
% Change 1987-1988	3.6%	5.1%	18.3%	17.4%	9.3%	2.4%	2.0%	-12.9%		5.8%
10 Year Change 1978-1988	2.2%	17.9%	64.4%	127.8%	5.3%	25.1%	93.2%	25.3%		20.8%

*Enrollment in the parallel program, a DTCC/UD joint venture, for these years was included in the UD figures.
**Decrease reflects move of School of Hotel/Restaurant Management to Pennsylvania Campus.

for in the part-time student count. In 1988 however, full-time student count increased 4.5 percent, accounting for 47% of the total annual increase.

Full-time student enrollment has been relatively stable from 1980 to 1987. The increase in full-time students in 1987 compared to 1980 was 70 students (0.3%). The full-time student increase for 1988 (996 students) is therefore a noteworthy change. Whether this enrollment surge is a one-year phenomenon or the beginning of an accelerating growth curve cannot be determined at this time.

It would not be surprising if we were witnessing a decline in enrollment in the Delaware college population. The surprise is that the steep decline in the number of Delaware high school graduates has not been reflected in the college enrollment figures. The Commission has not kept trend data related to the age of college attenders in the State, but it would be reasonable to conclude that the average age of Delaware's college population has increased over the past several years. (The average age of undergraduates for the 1987-88 school year are contained in Table 39).

Additionally, the number of out-of-state students has increased rather significantly over at least the past four years.

With the known direction of high school graduating classes over the next four years in Delaware and surrounding states, college enrollment growth or even stability will increasingly depend on institutions' ability to attract older students and students from outside of Delaware.

HEADCOUNT ENROLLMENT

As indicated in Table 26 Delaware Tech had the greatest percentage (18.3%) increase in enrollment from fall of 1987 to fall of 1988. The UD/Delaware Tech Parallel Program was second with a 17.4% enrollment increase. Only one institution, Widener University, Delaware Campus, reported an enrollment decrease. This decrease results from the University moving its School of Hotel/Restaurant Management from its Delaware campus to its Pennsylvania campus.

The combined enrollment of the independent colleges decreased 2.5% (173 students). The combined increase of the public institutions was 7.8% (2,279 students). The public institutions enrolled 82.1% of Delaware's total headcount.

FULL AND PART-TIME ENROLLMENT

Full-time enrollment as percentage of total student headcount decreased slightly from 1987 to 1988. For the fall of 1987 full-time enrollment accounted for 61.3% of headcount, compared to 60.6% in fall of 1988. The percentage distribution of full-time and part-time students at each college is presented in Table 29.

The University of Delaware has the highest percentage of full-time students (76%). The University of Delaware is the only institution which shows a consistently rising percentage of full-time students since 1975.

At Delaware State College, Widener University (DE), Wesley College and the University of Delaware, full-time enrollment makes up more than half of the headcount. Wilmington College has the highest percentage of part-time students, at 75%. Delaware Tech has shown a consistent trend in increasing the percentage of part-time students during the thirteen year period shown in Table 29, culminating in a 67% part-time share in 1988.

Figure 4

Full-Time & Part-Time Student Enrollment 1980-1988

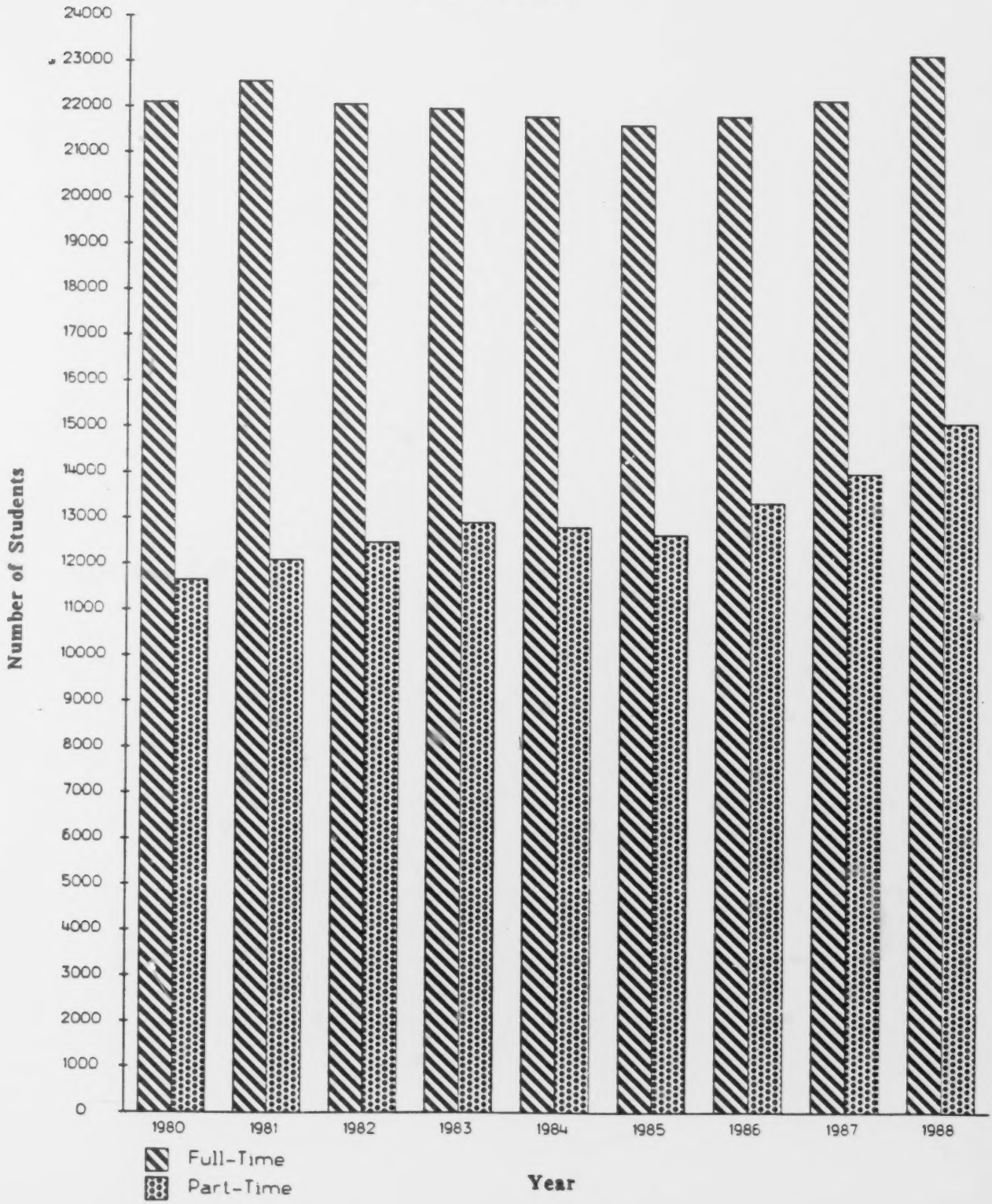


Table 27

Full-Time Equivalent* Enrollment at Delaware Colleges, Fall 1985 - 1988

Fall	1985	1986	1987	1988
Delaware State College	1,851	1,777	1,851	2,013
University of Delaware	15,052	15,336	15,578	16,076
Parallel	382	379	436	536
DTCC				
Southern	1,076	1,087	1,168	1,396
Wilmington/Stanton	2,293	2,366	2,295	2,681
Terry	721	806	825	960
Total DTCC	4,090	4,259	4,288	5,037
Wesley	728	757	803	946
Goldey Beacom College	1,237	1,164	1,117	1,170
Wilmington College	498	668	736	745
Widener	1,965	1,898	2,006	1,663
TOTAL:	25,803	26,238	26,815	28,186
% increase	-	1.7%	2.2%	5.1%

*Full-time equivalent (FTE) enrollment can be calculated in several different ways. Since there is no uniform FTE calculation used in the State, the Commission has consistently used the following rough calculation to arrive at full-time-equivalency for all colleges:
(Full-time students) + (Part-time students ÷ 3) = FTE.

Table 28

Fall Enrollment 1988
By Full-Time/Part-Time, Graduate/Undergraduate Status and Sex

	Full-Time				Part-Time				Total
	Undergrad.		Graduate		Undergrad.		Graduate		
	Men	Women	Men	Women	Men	Women	Men	Women	
Delaware State College	764	956	14	30	199	292	71	184	2,510
University of Delaware	5,724	7,555	747	482	1,683	2,028	439	554	19,212
Parallel Program	241	260	-	-	40	65	-	-	606
DTCC Southern	354	597	-	-	477	857	-	-	2,285
Wilm/Stanton	763	867	-	-	1,293	1,859	-	-	4,782
Terry	176	257	-	-	581	1,001	-	-	2,015
DTCC Total	1,293	1,721	-	-	2,351	3,717	-	-	9,082
Wesley College	360	465	-	-	147	215	-	-	1,187
Goldey Beacom College	222	621	-	-	246	739	-	-	1,828
Wilmington College	164	169	28	16	235	420	242	209	1,483
Widener University, DE	150	404	485	288	183	417	258	149	2,334
TOTALS	8,918	12,151	1,274	816	5,084	7,893	1,010	1,096	38,242

Table 29

Percentage Full-Time (FT) and Part-Time (PT) Enrollment at Delaware Colleges
Fall 1975 - Fall 1988

Fall of	UD		DSC		DTCC		Wesley		Goldey Beacom		Wilmington		Widener DE Campus	
	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT
1975	68	32	80	20	52	48	-	-	-	-	-	-	-	-
1976	69	31	81	19	56	44	-	-	-	-	-	-	-	-
1977	71	29	78	22	52	48	-	-	-	-	-	-	-	-
1978	72	28	76	24	47	53	60	40	65	35	34	66	66	34
1979	73	27	76	24	48	52	51	49	54	46	40	60	68	32
1980	74	26	76	24	47	53	53	47	50	50	56	44	66	34
1981	75	25	76	24	46	54	47	53	41	59	47	53	67	33
1982	74	26	76	24	45	55	46	54	44	56	47	53	62	38
1983	75	25	74	26	46	54	46	54	49	51	25	75	50	50
1984	76	24	74	26	41	59	35	65	50	50	27	73	57	43
1985	77	23	71	29	37	63	51	49	48	52	27	73	57	43
1986	76	24	65	35	35	65	59	41	45	55	32	68	62	38
1987	76	24	66	34	34	66	61	39	44	56	26	74	62	38
1988	76	24	70	30	33	67	70	30	46	54	25	75	57	43

MALE/FEMALE COMPOSITION

Women students outnumbered men in headcount enrollment in the fall of 1988 by 5,670. This was more than the 5,090 majority held by women in 1987, but the overall percentage of women remains at 57% of total headcount enrollment. Table 31 shows a trend since 1978 toward higher percentage participation by women. In contrast to the faster, consistent increase in women as a percentage of total headcount up to 1982, the past five years' data would indicate a leveling of that trend. Nationally the same trend has been occurring and most researchers feel that the current proportional representation of men and women will remain about the same over the next several years.

There is a difference in male/female composition between part-time and full-time student populations. Women constitute 56.0% of full-time enrollment and 59.6% of part-time enrollment. Table 30 shows the male/female composition of each college in the State. Goldey Beacom records the highest percentage of female students and Wilmington College the lowest. Women are the majority within all colleges in the State.

FIRST-TIME FRESHMEN

Table 32 presents numbers of full- and part-time (combined) first-time freshmen. First-time freshmen are entering students who have not previously attended any college, and thus represent the new entrants into the college market. First-time freshmen enrollment may indicate future enrollment trends, and may be the most sensitive measure of the effects of changes in tuition, financial aid, or other economic variables. It is felt that, in combination, data on enrollment, first-time freshmen and degrees awarded can provide an overall perspective on enrollment pattern characteristics.

As indicated in Table 32, the number of first-time freshmen increased by 830 between 1987 and 1988, an increase of 11.6%.

This increase follows a 3.7% decrease the previous year. The number of first-time freshmen is the highest recorded since 1981. The year to year fluctuations in first-time freshmen in Table 32 indicate no consistent trend.

Table 30

Men and Women Students as a Percentage
Of Total Headcount Enrollment, Fall 1988, by Institution

	Men	Women
University of Delaware	44.8%	55.2%
Delaware State College	41.8%	57.3%
Delaware Technical & Community College		
Southern	36.4%	63.6%
Terry	37.6%	62.4%
Wilmington/Stanton	43.0%	57.0%
Goldey Beacom College	25.6%	74.4%
Wesley College	42.7%	57.3%
Widener Univ., Delaware Campus	46.1%	53.9%
Wilmington College	45.1%	54.9%

Table 31

Men and Women Students as a Percentage
Of Total State Headcount, Fall 1978-1988

Year	Men	Women
1978	48%	52%
1979	46%	54%
1980	45%	55%
1981	44%	56%
1982	45%	55%
1983	45%	55%
1984	44%	56%
1985	44%	56%
1986	43%	57%
1987	43%	57%
1988	43%	57%

Table 32

First-Time Freshmen (Headcount) Enrollment
(Full and Part-Time)
In Degree, Diploma & Certificate Programs
Fall 1981 - Fall 1988

	1981	1982	1983	1984	1985	1986	1987	1988
University of Delaware	3,170	3,466	3,173	3,666	3,349	3,495	3,486	3,685
Delaware State College	431	453	400	428	411	386	428	528
Delaware Technical & Community College								
Southern	746	506	466	495	558	558	519	652
Stanton/Wilmington	1,479	1,266	1,061	934	1,139	1,213	1,127	1,363
Terry	592	388	392	413	481	468	471	509
Wesley College	300	268	322	547	262	277	316	368
Goldey Beacom College	473	404	401	416	405	484	324	370
Widener University, Delaware Campus	877	525	918	744	507	446	374*	362*
Wilmington College	201	171	172	68	64	141	141	179
TOTAL	8,269	7,447	7,305	7,711	7,176	7,468	7,186	8,016

*School of Hotel/Restaurant Management included prior to 1987.

RESIDENCE OF FIRST-TIME FRESHMEN

Table 33 indicates the Fall 1988 residence status (Delaware or out-of-state) of first-time freshmen for Delaware colleges. The data do not include transfer students, unclassified students, or first-time graduate and law students.

The percentage of out-of-state students who were first-time freshmen at Delaware institutions has remained reasonably stable from 1983 to 1988 while the number has increased 12%.

First-time freshmen who are residents of Delaware are in the majority at three schools - Delaware Tech, Wilmington College and Goldey Beacom College. Out-of-state students are the majority of first-time freshmen at four of the seven Delaware colleges.

Table 33

Student Residence Data for First-Time Freshmen* Fall 1983, 1986 and 1988 (Headcount)

		1983		1986		1988	
		Delaware	Non-Delaware	Delaware	Non-Delaware	Delaware	Non-Delaware
University of Delaware	No.	1,393	2,331	1,348	2,147	1,457	2,228
	%	37%	63%	38.6%	61.4%	39.5%	60.5%
Delaware State College	No.	248	182	158	228	252	276
	%	58%	42%	40.9%	59.1%	47.7%	52.3%
DTCC Southern	No.	434	56	500	58	594	58
	%	89%	11%	89.6%	10.4%	91.1%	8.9%
DTCC Terry	No.	395	7	457	11	497	12
	%	98%	2%	97.6%	2.4%	97.6%	2.4%
DTCC-Stanton/ Wilmington	No.	872	50	1,146	67	1,258	105
	%	95%	5%	94.5%	5.5%	92.3%	7.7%
Goldey Beacom College	No.	235	181	289	221	200	170
	%	56%	44%	56.7%	43.3%	54.1%	45.9%
Wesley College	No.	338	205	94	183	105	263
	%	62%	38%	33.9%	66.1%	28.5%	71.5%
Widener Univ. DE Campus	No.			124	322	105	257
	%			27.8%	72.2%	29.0%	70.1%
Wilmington College	No.	96	15	394	47	100	79
	%	86%	14%	89.3%	10.7%	55.9%	44.1%
TOTAL	No.	4,061	3,260	4,510	3,284	4,568	3,448
	%	55%	45%	57.9%	42.1%	57.0%	43.0%

*Does not include first-time graduate students or law students.

Table 34 lists the percentage of Delaware college first-time, out-of-state freshmen who are residents of selected states. Only those states from which 25 or more students come are listed.

In 1988 out-of-state, first-time freshmen at Delaware institutions represent 40 states, the District of Columbia, and foreign countries. While their number over the eight year period increased by aproximately 40%, the distribution of "feeder" states has remained relatively stable. New Jersey, Pennsylvania, Maryland and New York, in that order provide the largest number of students arriving as freshmen on Delaware campuses. Students from these four states account for approximately 91% of all out-of-state freshmen.

Table 34

Percentage of 1981, 1986 and 1988 Out-Of-State First-Time Freshmen at Delaware Colleges From Selected States

	1981	1986	1988
Pennsylvania	29.2%	30.5%	29.9%
Maryland	21.7%	19.1%	17.8%
New Jersey	33.2%	35.7%	34.2%
Virginia	1.2%	1.1%	1.9%
New York	6.1%	7.9%	9.2%
Connecticut		1.3%	1.9%
Other	8.6%	4.4%	5.1%
	100.0%	100.0%	100.0%

Transfer Students

In addition to first-time freshmen, another group of "new" students arriving at colleges each year are students who transfer from other institutions. In 1988, Delaware institutions received a total of 1,459 undergraduate transfers. Of these, 1,016 (69.6%) were Delawareans transfering between two Delaware colleges or to a Delaware college from out-of-state; 30.4% were out-of-state students.

Numbers of Delaware and out-of-state transfer students enrolling at each institution in the Fall of 1988 are displayed in Table 35.

Table 35

Transfer Students Enrolling at Delaware Colleges, Fall, 1988

	Delaware	Non-Delaware	Total
University of Delaware	357	277	634
Delaware State College	85	39	124
DTCC - Southern	73	13	86
DTCC - Terry	16	2	18
DTCC - Stanton/Wilmington	173	20	193
Goldey Beacom College	5	1	6
Wesley College	42	21	63
Widener Univ., DE Campus	55	35	90
Wilmington College	210	35	245
	1,016	443	1,459

Racial Composition

White students constituted 83.9% of the higher education headcount in Delaware in the fall of 1988. Black students accounted for 11.3% and the Hispanic category made up 0.9%. Others including non-resident aliens, American Indians, Alaskan Natives and Asian or Pacific Islanders, made up the remaining 3.9%.

Blacks, as a percent of higher education headcount increased from 10.9% in 1986 to 11.3% in 1988. During that same period, the Hispanic enrollment dropped from 1.2% of headcount to .9%.

From 1980 to 1988, the number of blacks enrolled at Delaware colleges increased approximately 45%. The eight year increase for black males was 33% and for females a 53% increase was recorded. While national studies have found that the number of black males in college has been decreasing, in Delaware that has not been the case from 1980 to 1988. The growth of the Black male college population, however, has been lower than that of the Black female population at Delaware colleges. Table 36 depicts the decrease of male college students as a percentage of the college population and the sharper decrease of Black males as a percentage of the Black student population.

Table 36

Percentage of Delaware's College Population Which Is Male and Female and Percentage of Delaware's Black Student Population Which Is Male and Female For 1980, 1984, and 1988

	All Men	All Women	Black Men	Black Women
1980	45%	55%	42%	58%
1984	44%	56%	40%	60%
1988	43%	57%	38%	62%

The difference in racial composition between the full- and part-time student population is small. As shown in Table 37 the percentage of Blacks is slightly higher in the part-time population as are Whites and Hispanics. The percentage of "other" racial/ethnic groups is higher in the full-time population.

Table 37

White, Black, Hispanic and Other* Students
As A Percentage of Total Fall 1988 Headcount Enrollment

	White	Black	Hispanic	Other
University of Delaware	90.4%	4.3%	0.6%	4.7%
Delaware State College	40.0%	57.5%	0.6%	1.9%
Delaware Technical & Community College				
Southern	82.9%	14.9%	0.6%	1.6%
Terry	79.4%	16.2%	1.9%	2.5%
Wilmington/ Stanton	81.2%	13.8%	1.9%	3.1%
Wesley College	87.4%	11.3%	0.9%	0.4%
Goldey Beacom College	84.6%	11.5%	1.3%	2.6%
Wilmington College	80.5%	17.8%	1.1%	0.6%
Widener, DE	94.6%	4.1%	0.4%	0.9%

*Other, as used here includes the following: Non-resident alien, American Indian or Alaskan Native, Asian or Pacific Islander.

Table 38

Percentage White, Black, Hispanic and Other Students
In Delaware Full-Time and Part-Time
Postsecondary Student Population Fall 1988

	White	Black	Hispanic	Other	Total
Part-Time	85.0%	11.1%	1.2%	2.7%	100%
Full-Time	83.1%	11.5%	0.8%	4.6%	100%
Total	83.9%	11.3%	0.9%	3.9%	100%

Percentagaes of the four racial categories for individual colleges are presented in Table 37. Delaware State College has the highest percentage of Black student enrollment (57.5%) and the University of Delaware has the lowest (4.3%). The percentage of Black students at the University of Delaware increased from 3.8% in 1986 to 4.3% in 1988. The percentage of Black students also increased at Delaware Tech, Wesley College and Goldey Beacom College and Delaware State College from 1986 to 1988. At Delaware State College the percentage of White student enrollment dropped from 43% in 1986 to 40% in 1988.

Table 39

Average Age of Full-Time and Part-Time
Degree Seeking Undergraduate Students by College, Fall 1986

	Full-Time	Part-Time
Delaware State College	21.9	30.5
University of Delaware	20.0	26.8
DTCC, Southern	26.4	31.2
DTCC, Wilmington/Stanton	23.4	29.5
DTCC, Terry	25.8	31.2
Goldey Beacom College	23.5	24.1
Wesley College	20.1	33.2
Wilmington College	26.7	32.8
Widener University, DE	19.7	32.4
State Average	21.0	29.6

Age of Undergraduates

Table 39 lists the average (mean) age of degree seeking undergraduates enrolled at Delaware colleges in the fall of 1987. The overall average of full-time undergraduates was 21 years. Part-time undergraduates' ages averaged to 29.6 years.

The 1987 data was the first uniformly structured data collected on age of students, and thus trends related to age are available.

Degrees and Other Formal Awards Conferred by Delaware Colleges

DEGREES AND OTHER FORMAL AWARDS CONFERRED BY DELAWARE COLLEGES 1980 to 1988

While institutions of higher education have missions somewhat broader than degree production, a primary measure of institutional productivity and character is the number and level of degrees awarded.

Community or public service and research activities are two other measures of varying importance to institutions depending on their perceived or stated mission. Another area of growing importance is continuing education activity that is, in some cases, not aimed at degree production.

Conferring of formal recognition for the students' completion of an integrated course of study, however, must be considered a major aspect of each college's mission. Trends in the level of this major activity provide perspective on the health and direction of colleges and the direction of student choices as well as the health and direction of the state's human resource pool.

The Tables contained herein summarize total award data for past years: awards by level, by college, by major field, and by sex.

Awards, including certificates and diplomas, associate degrees, bachelor's degrees, master's degrees, first professional degrees, and doctorates, are documented for each year since 1980. Awards for each year include all awards granted between July 1 of the previous year and June 30 of the year listed. The University of Delaware is the only institution which awards the Ph.D. and the Delaware Law School is the only institution awarding the first professional degree, the JD, in Law.

The data utilized have been provided by each institution as part of the Integrated Postsecondary Education Data System (IPEDS), collected in the fall of each year. Criteria for degree and major area of study categories follow IPEDS guidelines.

The listing of majors (Table 50) is not exhaustive. It contains only those IPEDS categories under which awards were listed by the Delaware colleges. There is, for example, no listing for pharmacy or for architecture or Chinese language.

IPEDS degree categories were expanded for the 1983 report and some titles were deleted. Data for preceding years were placed in the most appropriate new categories.

In the new taxonomy each subject area is followed by categories of related technologies. These technologies are separately listed in Table 50, but are grouped into major fields in Tables 43, 44 45, 46, 47, 48 and 49. For example, the field of "Engineering" includes graduates of the four year engineering programs as well as the two year "electronics technology" programs.

It is the Commission's hope that the data included herein will be of great interest to the colleges and to state and private sector planning organizations.

Table 40 lists the combined awards granted by all Delaware colleges from 1980 to 1988. The total number of awards decreased 2.0% from 1986 to 1987, and increased by 7.0% from 1987 to 1988.

The 6,002 awards of 1984 represent a high point in the nine year trend. The number of awards granted in 1988 though is only .5% lower.

There is no apparent long-term increasing or decreasing trend in total awards or in the various award levels over the nine year period. Table 40 generally reflects stability in degree production for Delaware.

Table 40

Total Awards Granted By Delaware Colleges
By Award Level By Year

	1980	1981	1982	1983	1984	1985	1986	1987	1988
Diplomas, Certificates Other Formal Awards	166	151	142	265	310	311	298	272	386
Associate Degrees	1,192	1,256	1,366	1,380	1,333	1,303	1,181	1,153	1,089
Bachelor's Degrees	3,265	3,194	3,231	3,328	3,401	3,264	3,322	3,242	3,487
Master's Degrees	468	452	516	518	613	552	567	586	639
1st Professional Degrees (Law)	211	221	221	222	238	265	261	245	283
Doctoral Degrees	70	58	105	58	107	93	78	96	106
Total Awards	5,372	5,332	5,581	5,771	6,002	5,788	5,707	5,594	5,990

Table 41

Degrees and Other Formal Awards
Conferred by Colleges

College	1981	1982	1983	1984	1985	1986	1987	1988
DTCC - Southern								
Diplomas/Certificates	57	55	166	208	201	183	162	206
Associate Degrees	161	198	171	195	161	205	178	176
Bachelor's Degrees	-	-	-	-	-	-	-	-
Master's Degrees	-	-	-	-	-	-	-	-
Doctoral Degrees	-	-	-	-	-	-	-	-
Total Awards:	218	253	337	403	362	388	340	382
DTCC - Stanton/Wilmington								
Diplomas/Certificates	19	33	31	37	26	33	32	62
Associate Degrees	391	431	423	449	445	391	398	345
Bachelor's Degrees	-	-	-	-	-	-	-	-
Master's Degrees	-	-	-	-	-	-	-	-
Doctoral Degrees	-	-	-	-	-	-	-	-
Total Awards:	410	464	454	486	471	424	430	407
DTCC - Terry								
Diplomas/Certificates	25	23	31	39	26	44	44	53
Associate Degrees	80	128	105	109	100	76	109	98
Bachelor's Degrees	-	-	-	-	-	-	-	-
Master's Degrees	-	-	-	-	-	-	-	-
Doctoral Degrees	-	-	-	-	-	-	-	-
Total Awards	105	151	136	148	126	120	153	151
Goldey Beacom College								
Diplomas/Certificates	48	29	37	24	54	37	34	49
Associate Degrees	206	158	170	191	163	198	180	168
Bachelor's Degrees	83	75	92	97	99	109	115	96
Master's Degrees	-	-	-	-	-	-	-	-
Doctoral Degrees	-	-	-	-	-	-	-	-
Total Awards:	337	262	299	312	316	344	329	313
Wesley College								
Diplomas/Certificates	2	2	-	2	4	1	-	3
Associate Degrees	132	138	136	129	106	95	104	92
Bachelor's Degrees	39	37	37	35	55	40	49	48
Master's Degrees	-	-	-	-	-	-	-	-
Doctoral Degrees	-	-	-	-	-	-	-	-
Total Awards:	173	177	173	166	165	136	153	143

Table 41 (Continued)

College	1981	1982	1983	1984	1985	1986	1987	1988
Delaware State College								
Diplomas/Certificates	-	-	-	-	-	-	-	-
Associate Degrees	-	-	-	-	-	-	-	-
Bachelor's Degrees	241	275	253	219	224	235	259	273
Master's Degrees	-	-	3	24	21	40	36	76
Doctoral Degrees	-	-	-	-	-	-	-	-
Total Awards:	241	275	256	243	245	275	295	349
Wilmington College								
Diplomas/Certificates	-	-	-	-	-	-	-	-
Associate Degrees	7	5	6	6	5	1	7	3
Bachelor's Degrees	166	154	168	163	188	167	141	150
Master's Degrees	20	28	43	58	89	113	108	129
Doctoral Degrees	-	-	-	-	-	-	-	-
Total Awards:	193	187	217	227	282	281	256	282
Widener University - Delaware Campus								
Diplomas/Certificates	-	-	-	-	-	-	-	10
Associate Degrees	237	266	317	227	298	196	161	196
Bachelor's Degrees	-	7	47	65	127	143	49*	61
Master's Degrees	-	8	23	40	**	-	-	-
Doctoral Degrees (JD's)	221	221	222	238	265	261	245	283
Total Awards:	458	502	609	570	690	600	455	550
University of Delaware								
Diplomas/Certificates	-	-	-	-	-	-	-	-
Associate Degrees	42	43	52	27	25	19	14	12
Bachelor's Degrees	2,665	2,683	2,731	2,822	2,571	2,628	2,639	2,863
Master's Degrees	432	480	449	491	442	414	442	431
Doctoral Degrees	58	105	58	107	93	78	96	106
Total Awards:	3,197	3,311	3,290	3,447	3,131	3,139	3,191	3,413

*School of Hotel, Restaurant Management reported through PA campus beginning 1987.

**All Master's (MBA's) awarded through School of Management, PA campus.

Table 41 lists degrees by level for each Delaware college campus. As with the state-wide picture there are few general trends that can be noted with regard to the individual colleges' degree data.

Table 42

1984 - 1988 Awards
To Women By Award Level

	1984	1985	1986	1987	1988
Total Awards:	56.3%	56.5%	54.8%	58.9%	58.6%
Diplomas/Certificates	60.0%	62.4%	63.1%	58.1%	54.4%
Associate Degrees	63.8%	64.8%	67.6%	68.0%	69.9%
Bachelor's Degrees	57.2%	57.0%	56.0%	59.4%	59.6%
Master's Degrees	48.3%	49.0%	48.1%	53.9%	50.0%
1st Professional Degrees	31.1%	29.4%	32.2%	35.5%	36.7%
Doctoral Degrees	29.0%	31.2%	30.8%	27.0%	33.0%

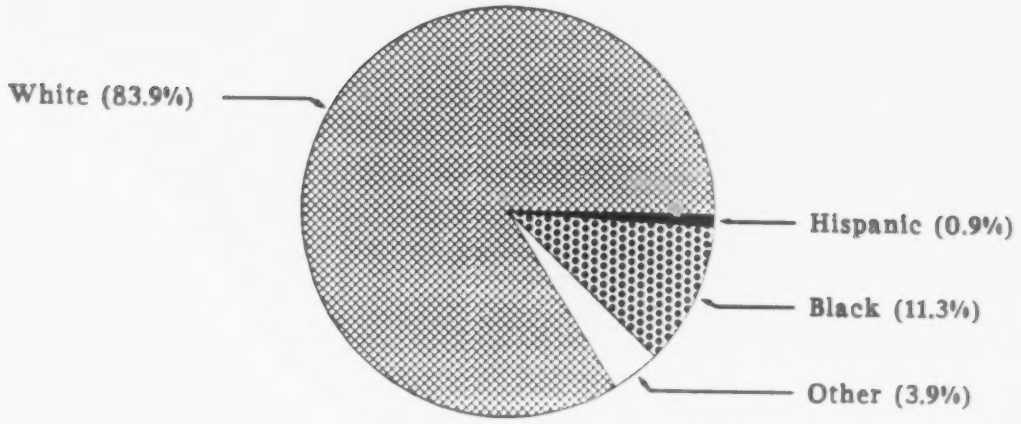
Table 42 lists the percentage of awards at each level made to women from 1984 through 1988. Women earned 58.6% of all awards in 1988. This is a favorable representation given the fact that women comprise 57% of current higher education enrollment.

While women are over-represented in the associate degree category, they are somewhat underrepresented at the doctoral and first professional levels.

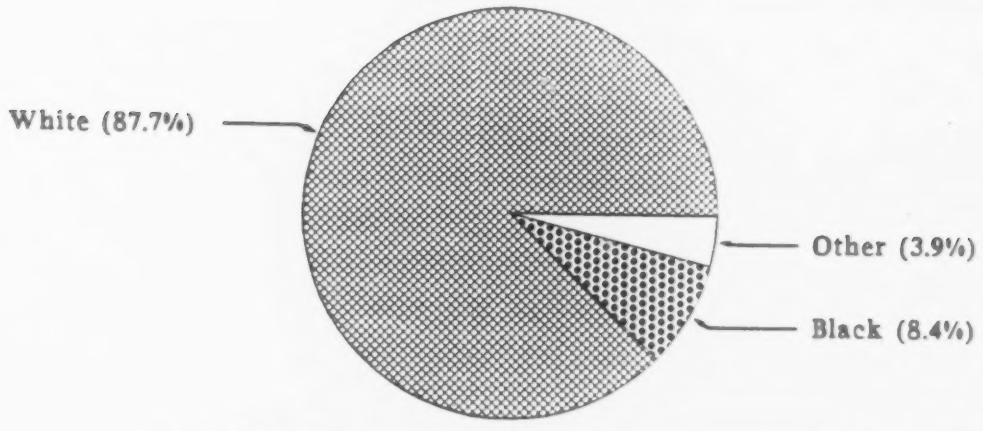
Figure 5 displays a comparative view of enrollment by racial group for Fall of 1988 and degrees awarded by racial group for Spring of 1987. Although the cohort groups represented graphically are different, a rough comparison of enrollment rates and degree achievement is provided.

Figure 5

Enrollment by Race, Fall 1988



Degrees Awarded by Race, Spring 1987*



* Racial data for degree completion is collected biannually. Spring 1987 is the latest available.

Table 43 provides a display of the percentage of total awards granted in each of twenty-seven disciplines during the ten year period. Those disciplines that have increased by more than two percentage points from 1978 to 1988 in terms of percentage of total awards in the State are: computer and information sciences, business and marketing, communications, and health. Fields that have decreased in representation by more than two percentage points are agriculture, education, and liberal/general studies.

Table 44 provides a display percentage of awards in the twenty-seven disciplines made to women and men in 1988. Notations in the table indicate fields where the percentage of awards is ten percentage points lower or higher than representation in total degrees granted.

In a similar fashion Table 45 presents the award distribution for three racial groupings.

Table 46 lists the ten fields of study with the highest percentage of awards in 1978 and the fields with the highest percentage in 1988. Table 46 data include all degree levels. Tables 47, 48 and 49 present in the same format the top ten fields of study for associate degree recipients, bachelor's and master's degree recipients, respectively.

Table 50 provides a six-year display of awards in specific categories within the twenty-seven major degree field headings, and total numbers of awards in each field.

Table 43

Percentage of Total Awards*
Granted In Each Of Twenty-Seven Disciplines

Disciplines	1978	1980	1982	1984	1985	1986	1987	1988
Agriculture	3.4	3.4	3.2	2.8	2.6	2.6	2.4	1.4(-)
Business & Marketing	26.2	25.7	27.5	27.5	24.9	28.5	28.8(+)	30.2(+)
Communications	1.4	2.6	2.2	2.1	2.2	2.4	2.2	3.4(+)
Computer & Info. Sci.	1.0	1.2	2.4	3.2	3.2	3.5	3.1(+)	3.2(+)
Education	11.1	9.5	7.1	7.1	6.7	6.9	7.0(-)	7.6(-)
Engineering	7.9	9.1	10.1	10.0	10.6	9.9	9.4	8.5
Foreign Language	0.6	0.6	0.7	0.4	0.5	0.5	.5	.5
Health	7.3	8.5	9.8	9.8	11.4	9.7	10.1(+)	9.2(+)
Home Economics	2.9	3.6	3.6	4.0	3.5	3.7	3.5	3.4
Law	4.5	5.0	4.3	4.2	5.3	4.8	4.7	4.9
Letters	1.1	1.5	1.5	1.5	1.7	1.7	2.3	2.1
Liberal/General Studies	5.7	3.8	2.5	0.6	0.2	0.8	.8(-)	.8(-)
Library Sciences	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Life Sciences	3.6	2.6	2.0	2.7	2.7	2.5	2.8	2.8
Mathematics	0.8	0.8	0.4	0.5	1.0	1.0	.9	.8
Multi-Interdisciplinary Studies**	1.5	0.9	0.6	1.3	2.0	1.0	.5	.3
Parks & Recreation	0.0	0.0	0.1	0.2	0.2	0.2	.1	.1
Philosophy & Religion	0.2	0.0	0.2	0.1	0.2	0.2	.1	.1
Physical Science	2.5	2.6	2.7	3.3	3.3	2.8	2.4	1.9
Psychology	2.8	2.6	2.8	3.1	3.3	2.6	3.4	3.2
Protective Services	2.9	2.0	1.4	1.4	1.3	1.6	1.3	1.1
Public Affairs	1.4	1.1	2.2	0.5	0.6	0.7	.8	.8
Social Sciences	9.2	10.1	10.7	9.7	9.3	8.6	9.3	9.2
Mechanics & Repairers	0.0	0.0	0.0	0.2	0.6	0.4	.5	.9
Transportation & Material Moving	0.0	0.0	0.0	1.7	1.5	1.6	1.3	1.2
Construction Trades	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0
Visual & Performing Arts	1.9	2.8	2.1	2.1	1.7	1.8	1.8	2.1
TOTAL	100%	100%	100%	100%	100%	100%	100%	100%

* "Awards" include all undergraduate and graduate degrees, and certificates or diplomas. Specific numbers of awards for each field are contained in Table

** Includes Area & Ethnic studies.

(-) Denotes loss of two or more percentage points from 1978 to 1988.

(+) Denotes gain of two or more percentage points from 1978 to 1988.

Table 44

Number and Percentage of
Awards* By Field of Study by Sex, 1988

Disciplines	Men		Women	
	N	%	N	%
Agriculture	41	50.6	40	49.4
Business & Marketing	673	37.7(-)	1112	62.2
Communications	56	27.2(-)	150	72.8(+)
Computer	103	53.4(+)	90	46.6(-)
Education	106	22.9(-)	356	77.1(+)
Engineering	410	80.7(+)	98	19.3(-)
Language	2	6.9(-)	27	93.1(+)
Health	39	7.1(-)	511	92.9(+)
Home Economics	31	15.0(-)	175	85.0(+)
Law	179	60.7(+)	116	39.3(-)
Letters	39	31.0(-)	87	69.0(+)
Liberal/General Studies	15	30.6(-)	34	69.4(+)
Library Sciences	-	-	-	-
Life Sciences	80	48.5	85	51.5
Mathematics	34	68.0(+)	16	32.0(-)
**Multi-Interdisciplinary Studies	5	31.2(-)	11	68.8(+)
Parks & Recreation	2	33.3	4	66.7
Philosophy & Religion	4	100.0(+)	-	-
Physical Science	77	67.0(+)	38	33.0(-)
Psychology	49	27.0(-)	133	73.0(+)
Protective Services	45	67.2(+)	22	32.8(-)
Public Affairs	17	35.4	32	65.3
Social Sciences	307	54.0(+)	262	46.0(-)
Mechanics & Repairers	51	98.1(+)	1	1.9(-)
Transportation & Material Moving	63	88.7(+)	8	11.3(-)
Construction Trades	-	-	1	100.0(+)
Visual & Performing Arts	48	37.8	79	62.2
TOTALS	2481	41.4	3509	58.6

*"Awards" include all undergraduate and graduate degrees, and certificates or diplomas.
**Includes Area and Ethnic Studies
(-)Denotes ten percentage points lower than representation in total degrees granted in 1988.
(+)Denotes ten percentage points higher than representation in total degrees granted in 1988.

Table 45

Number and Percentage of
Awards By Fields of Study By Race, 1987*

Field of Study	Black		White		Other	
	N	%	N	%	N	%
Agriculture	10	(7.4)	116	(85.9)	9	(6.7)
Business & Marketing	196	(12.2)	1361	(84.5)	54	(3.3)
Communications	8	(6.4)	114	(91.2)	3	(2.4)
Computer & Info. Science	5	(2.9)	148	(86.6)	18	(10.5)
Education	23	(5.9)	363	(93.1)	4	(1.0)
Engineering	20	(3.8)	458	(87.6)	45	(8.6)
Foreign Language	2	(7.4)	23	(85.1)	2	(7.4)
Health	41	(7.2)	510	(89.9)	16	(2.8)
Home Economics	6	(3.0)	189	(95.5)	3	(1.5)
Law	4	(1.5)	253	(96.6)	5	(1.9)
Letters	4	(3.0)	123	(93.8)	4	(3.0)
Liberal/General Studies	4	(8.6)	42	(91.2)	0	(0)
Life Sciences	8	(4.9)	139	(87.9)	11	(6.9)
Mathematics	14	(29.2)+	31	(64.6)-	4	(8.3)
Multi-Interdisciplinary Studies	0	(0)	25	(86.2)	4	(13.8)
Parks & Recreation	0	(0)	8	(100.0)+	0	(0)
Philosophy & Religion		(0)	5	(83.3)	1	(16.6)
Physical Science	8	(6.0)	119	(89.5)	6	(4.5)
Psychology	21	(11.1)	163	(86.2)	5	(2.7)
Protective Services	9	(12.8)	59	(84.2)	2	(2.8)
Public Affairs	7	(16.2)	34	(79.0)	2	(4.6)
Social Sciences	29	(5.4)	470	(90.1)	22	(4.1)
Mechanics & Repairers	8	(29.6)+	19	(70.3)-	0	(0)
Transportation & Material Moving	37	(51.4)+	35	(48.6)-	0	(0)
Construction Trades	0	(0)	1	(100.0)+	0	(0)
Visual & Performing Arts	4	(3.9)	95	(93.1)	3	(2.9)
Totals:	468	(8.4)	4903	(87.7)	222	(3.9)

* Racial data for degree completion is collected biannually Spring 1987 is the latest available.

(-) Denotes ten percentage points lower than representation in total degrees granted in 1988.

(+) Denotes ten percentage points higher than representation in total degrees granted in 1988.

Table 46

Ten Fields of Study With Highest Percentage of Awards For 1978 and 1988

	1978		1988	
Rank	Field	% Of Total Awards	Field	% Of Total Awards
1	Business	26.6	Business & Marketing	29.79
2	Education	11.3	Social Sciences	9.49
3	Social Sciences	9.3	Health	9.18
4	Engineering	8.1	Engineering	8.48
5	Health	7.4	Education	7.71
6	Liberal/General Studies	5.8	Law	4.92
7	Law	4.5	Communications	3.43
8	Life Sciences	3.6	Home Economics	3.43
9	Agriculture	3.5	Computer/Info. Sciences	3.22
10	Protective Services	3.0	Psychology	3.03

Table 47

Ten Fields of Study With Highest Percentage of ASSOCIATE Degrees Awarded in 1978 and 1988

	1978		1988	
Rank	Field	% Of Total Awards	Field	% Of Total Awards
1	Business	49.3	Business & Marketing	43.0
2	Liberal/General Studies	18.3	Health	23.9
3	Engineering	9.0	Engineering	15.1
4	Health	8.2	Protective Services	4.78
5	Protective Services	6.8	Liberal/General Studies	4.32
6	Public Affairs	4.5	Computer/Info. Sciences	3.59
7	Computer/Info. Sciences	1.7	Life Sciences	.78
8	Law	1.5	Communications	.82
9	Communications	0.4	Agriculture, Education, Law, Social Sciences, & Visual & Performing Arts	.55
10	Home Economics	0.3		

While the largest percentage of associate degrees was awarded in the field of business in both 1978 and 1988, the actual number of degrees awarded in business decreased from 771 to 467 between 1978 and 1988. The decrease in number of degrees in this primary associate degree field is only partly a reflection of the overall drop (34%) in the number of associate degrees awarded in the State between 1978 (1,663) and 1988 (1,089). During this same period business related associate degrees dropped by 37%. Part of the decline is likely related to gains in other fields. Programs related to engineering and health (mainly nursing) more than doubled between 1978 and 1988, while two year liberal arts degrees numbering 286 in 1978 plummeted to 47 in 1988.

Table 48

Ten Fields of Study With Highest
Percentage of BACHELOR'S Degrees Awarded in 1978 and 1988

	1978		1988	
Rank	Field	% Of Total Awards	Field	% Of Total Awards
1	Business	19.2	Business & Marketing	28.94
2	Social Science	14.7	Social Science	14.57
3	Education	13.6	Education	8.74
4	Engineering	7.7	Engineering	6.79
5	Health	6.4	Health	6.42
6	Agriculture	5.6	Home Economics	5.50
7	Life Sciences	4.8	Psychology	4.61
8	Home Economics	4.8	Life Sciences	4.04
9	Psychology	4.6	Letters	2.75
10	Physical Science	3.1	Visual & Performing Arts	2.66

Of all associate degrees awarded in 1988, eighty-two percent are in the fields of business, health and engineering. This compares to 66% concentrated in these fields in 1978. Protective Services, the fourth largest area in 1988 with 4.7% of the degrees, ranked only fifth in 1978 but represented 6.8% of all associate degrees.

Bachelor's degrees in business conferred in 1988 by Delaware colleges totaled 1009, a 12.8% increase from the 1987 number. Degrees in the field of business now constitute over one quarter of all bachelor's degrees conferred in the State.

A 43% drop in the number of degrees in education was recorded from 1978 (406 degrees) to 1983 (219 degrees). In 1988, the number of bachelor's degrees in education is 19% higher (306) than the 1983 low. Engineering degrees conferred at the bachelor's

Table 49

Ten Fields of Study With Highest Percentage of MASTER'S Degrees Awarded in 1978 and 1988

	1978		1988	
Rank	Field	% Of Total Awards	Field	% Of Total Awards
1	Education	42.6	Business & Marketing	30.5
2	Social Sciences	10.3	Education	22.0
3	Life Sciences	8.2	Engineering	8.76
4	Business	7.8	Social Sciences	7.66
5	Engineering	7.6	Public Affairs	6.10
6	Physical Sciences	5.7	Visual & Performing Arts	3.75
7	Agriculture	4.0	Computer & Info. Sciences Y Letters	3.12
8	Visual & Performing Arts	3.6	Health	2.97
9	Home Economics	2.1	Physical Science	2.66
10	Psychology	1.7	Area & Ethnic Studies	2.50

level increased from 230 in 1978 to 288 in 1984. In 1988, 237 bachelor's degrees were awarded in engineering (a decrease of 18% since 1984) moving that field from third to fourth in the ranking.

Agriculture, the major of 5.6% of bachelor degree recipients in 1978, decreased to 2% of bachelor's degrees in 1987. Agriculture is no longer one of the top ten fields of study at the Baccalaureate level.

The decrease in master's degrees awarded in education between 1978 and 1988 was from 203 degrees to 141, a decrease of 30%. Coupled with an increase of about 410% in master's degree production in business (from 38 to 195 degrees), the percentage mix of master's degrees has been dramatically altered. At the

same time, degrees in health (nursing) and public affairs increased substantially, while social sciences, life sciences, and physical sciences declined as a percentage of degrees awarded.

Because the number of doctoral degrees awarded in the State is so small, an analysis of degree field percentages was not included since year-to-year fluctuations would be somewhat meaningless and misleading. The four leading areas of doctoral awards for 1988 were engineering (38 degrees), physical sciences (16 degrees), psychology (11 degrees), and letters (10 degrees). In addition, 283 Doctoral degrees (JD) in Law were awarded by Widener University School of Law.

Table 50

Discipline Specialty (Major field of study)	Diploma, Certificate Other Recognition						Associate Degrees						Bachelor's Degrees						Master's Degrees						Doctor's Degrees					
AGRIBUSINESS & PRODUCTION	83	84	85	86	87	88	83	84	85	86	87	88	83	84	85	86	87	88	83	84	85	86	87	88	83	84	85	86	87	88
Agri.Business & Mgmt.,gen'l							6						27	10	21	26	30	4												
Agri. Economics													10	13	10	9	8		3	6	4	1	5							
Agri. Business								5	6	7	3				5	3		3												
Agri., Other*										7																				
AGRICULTURAL SCIENCES																														
Agri. Sciences, gen'l							3	1	2				13	14	7	8	9	6												
Animal Sciences, gen'l							3		1				52	43	34	38	37	35	9	5	9	1	9	1		2		2	1	
Agronomy							2						42			1	2		6											
Plant Sciences, gen'l								1	1			2	1	29	33	25	13	25		9	4	8	6	2				1	1	1
Poultry							3	6	3	1	4																			
Ornamental Horticulture																	1		2	4		4	8							
Soil Sciences																														
RENEWABLE NATURAL RESOURCES																														
Renewable Nat. Res., gen'l								1					3	4																
Wildlife Mgmt.																														
Fisheries															1	2														
AREA ETHNIC STUDIES																														
American Studies													4	8	7	5	1	3		7	9	6	8	13						

AGRICULTURE	1983	1984	1985	1986	1987	1988
Total Awards	185	168	141	149	135	81

AREA & ETHNIC STUDIES	1983	1984	1985	1986	1987	1988
Total Awards	4	15	16	11	9	16

Table 50 (Continued)

Discipline Specialty (Major field of study)	Diploma, Certificate Other Recognition						Associate Degrees						Bachelor's Degrees						Master's Degrees						Doctor's Degrees					
BUSINESS & MANAGEMENT	83	84	85	86	87	88	83	84	85	86	87	88	83	84	85	86	87	88	83	84	85	86	86	88	83	84	85	86	87	88
business & Management,gen'l	1	5	4	4	7	1	88	22	45	77	35	67	55	30	59	42	35	28	34		13	39								
Accounting				2			96	59	53	59	84	88	241	250	242	260	201	223	6	6	10	3	4	8						
Banking & Finance							2						112	129	147	151	149	192												
Bus. Adm. & Mgmt., gen'l				1			63	103	80	65	72	76	213	124	117	123	204	144	63	85	112	103	90	118						
Business Economics																				58										
Hotel/Motel Mgmt.							37	24	28	10	2		28	35	90	107														
Transportation Mgmt.							2	5	3	1	2																			
Operations Research																27	22	20	1		3		1	1			1			1
Marketing Mgmt.							22	20	19	15	25	9	123	145	132	209	218	170												
Aviation Mgmt.													12	16	10	11														
Taxation																			3											
Product Mgmt.								1			1			44	44															
Mgmt. Info Systems									4	6	2				4	8	25	20												
Human Resources Dev.																		12						68						
Business, Other					1												7	115					60							
BUSINESS & OFFICE																														
Accounting & Computing				1		22	1	2	8	15	1		1	5	5	12														
Secretarial & Related,gen'l*				1	2	14	10					9	6	1		1		1												
Executive Secretarial							104	86	60	72	71	73																		
Stenographic	42	28	40	25	18	6																								
Word Processing	20	24	38	48		22	4	5	16	26		14																		
(CONTINUED NEXT PAGE)																														

*Note - Previous reporting category "Secretarial Studies" included all levels of secretarial preparation. Data for 1979-1985 are thus included in the Secretarial and Relation, general category.

Table 50 (Continued)

Discipline Specialty (Major field of study)	Diploma, Certificate Other Recognition						Associate Degrees						Bachelor's Degrees						Master's Degrees						Doctor's Degrees					
BUSINESS & OFFICE (Cont'd)	83	84	85	86	87	88	83	84	85	86	87	88	83	84	85	86	87	88	83	84	85	86	87	88	83	84	85	86	87	88
Clerk Typist	11		6	19	17	20						1																		
Typing, gen'l office related*	13	3	6	3	20	20	4	1	3	3	22	1																		
Business Data Entry	3		2	1	14				4		16																			
Acctg., Bookkeeping & Related			1	3	1	1			9																					
Machine Billing & Computing									1																					
Office Supv. & Mgmt.										25	10	15				6	11	11												
Legal Secretarial									25	21	14	13																		
Medical Secretarial				6	9	2			21	16	17	8																		
Credit Collection			19																											
Business Data Processing										1	5																			
MARKETING & DISTRIBUTION																														
Fashion Merchandising									74	36	42	54			15		20	68												
Tourism/Travel									39	22	23	31																		
General Mktg., other								7	4	2	4	8					2	4												
Retailing										1																				

BUSINESS	1983	1984	1985	1986	1987	1988
Total Awards:	1606	1545	1484	1443	1520	1620

MARKETING & DISTRIBUTION	1983	1984	1985	1986	1987	1988
Total Awards:	127	99	132	61	91	165

*Note - Previous reporting category "Secretarial Studies" incluried all levels of secretarial preparation. Data for 1979-1985 are thus included in the Secretarial and Relation, general category.

Table 50 (Continued)

Discipline Specialty (Major Field of Study)	Diploma, Certificate Other Recognition						Associate Degrees						Bachelor's Degrees						Master's Degrees						Doctor's Degrees					
	83	84	85	86	87	88	83	84	85	86	87	88	83	84	85	86	87	88	83	84	85	86	87	88	83	84	85	86	87	88
COMMUNICATIONS																														
Communications, gen'l							5	5	3	6	3	3	85	64	70	73	91	139	4	4	4	4	4	5						
Journalism							4	7	3	4	1	3	31	34	27	38	25	51												
Radio/Television, gen'l																														
Communications, other											1	3	6	5	9	6		2												
Advertising								3	1				1																	
COMPUTER & INFO SCIENCES																														
Computer & Info.Sci.,gen'l					3	5		15	13	21	10	18	70	64	69	63	64	69	7	7	10	21	22	20			1		3	3
Computer Programming						8																								
Data Processing			1	7	6	39	81	101	87	75	51	21	1			1														
Info. Sciences & Systems															1															
Systems Analysis																														
Computer & Info.Sci. Other								4			6					6														
Microcomputer Applications						10																								

COMMUNICATIONS	1983	1984	1985	1986	1987	1988
Total Awards:	136	122	117	132	125	206

COMPUTER & INFORMATION SCIENCES	1983	1984	1985	1986	1987	1988
Total Awards:	159	192	180	197	171	193

Table 50 (Continued)

Discipline Specialty (Major field of study)	Diploma, Certificate Other Recognition						Associate Degrees						Bachelor's Degrees						Master's Degrees						Doctor's Degrees					
EDUCATION	83	84	85	86	87	88	83	84	85	86	87	88	83	84	85	86	87	88	83	84	85	86	87	88	83	84	85	86	87	88
Education, gen'l							4	11					7	6	6	10	3	5	3											
Bilingual/Bicultural Educ.																														
Curriculum & Instruction																			22	48	37	44	43	55		2		2	1	
Ed. Admin., gen'l																			16	13	10	8	7	5		9	7	7	5	7
Test., Eval., Measure, Psch.																				2	4		1	2	2			2		1
Social Foundations																												1		
Special Ed., gen'l								1		1		2	5	21	12	22	12	17	11	8			4	18						
Ed. of Gifted								7					12								10	9	6	7						
Ed. of Emot./Handicapped																														
Student Couns. & Person. Svc.																			24	30	29	31	23	22						
Elementary Ed., gen'l							2	5	7		1	2	76	95	89	103	120	136												
Pre-Elementary Ed.							6	3	4	1			22	27	19	20	13	17				5								
Agricultural Ed.														5	2	3		1												
Art, Ed.													5	9	4	5	4	5	1			10								
Industrial Arts Ed., Occ.Ed.							2							3	2	3	2	2	1											
Home Economics Ed.													3	2	1	1		1	3		1	1								
Business Ed. **							1						8	7	8	7	4	3	1											
Marketing & Distrib. Ed.**							1						5					1												
Mathematics Ed.									1	1			5	2	1	3	9	4												
Music, Ed.													6	9	6	1	2	8												
Physical Ed.								1	2			1	64	58	35	57	46	63	9	12	10	8	9	19						
Reading Ed.																			11	6	4	2	2							
Science Ed.								3	1				1	1	9	4	9	10												

*Data for years 1979-82 was listed in previous publication under title "educational psychology"
**Obsolete title was Business, Commerce, Distributive Education. For 1983 two titles replace previous single title.

Table 50 (Continued)

Discipline Specialty (Major field of study)	Diploma, Certificate Other Recognition						Associate Degrees						Bachelor's Degrees						Master's Degrees						Doctor's Degrees					
EDUCATION (Cont'd)	83	84	85	86	87	88	83	84	85	86	87	88	83	84	85	86	87	88	83	84	85	86	87	88	83	84	85	86	87	88
English Education														11	9	7	12	15												
Social Studies Education											1			5		2	2													
Foreign Language Education														4	4	4	7	9												
Health Education														1																
School Psychology																				5		7	2	5		2		1		1
Teacher Ed., other									1	1		1		10	3		9	9			18		17	6				1		
Parenting Ed.											6			1																
Education, other										1							5						2	2					1	

EDUCATION	1983	1984	1985	1986	1987	1988
Total Awards:	339	424	360	393	390	356

Table 50 (Continued)

Discipline Specialty (Major field of study)	Diploma, Certificate Other Recognition						Associate Degrees						Bachelor's Degrees						Master's Degrees						Doctor's Degrees					
ENGINEERING	83	84	85	86	87	88	83	84	85	86	87	88	83	84	85	86	87	88	83	84	85	86	87	88	83	84	85	86	87	88
Chemical Engineering									1				78	60	63	49	41	36	10	15	18	10	5	1	8	8	8	12	14	13
Civil Engineering													42	42	44	67	61	60	14	14	10	17	12	15	6	2	4	3	1	6
Elec. & Communic. Eng.													71	71	67	63	52	68	9	9	9	11	6	17	1		6	4	2	5
Mechanical Engineering													75	93	71	67	61	55	12	10	16	17	18	18	1	5	4	2	6	13
Metallurgical Engineering																			2	1	2	2	4	5		1	1	1	2	1
Agricultural Engineering								2			1			20	20	12	14	16												
Engineering, other							1										3													
Engineering, Interdisciplinary																			3											
ENGINEERING & RELATED TECHNOLOGIES																														
Archit.Design & Const.Tech.							21	27	27	24	18	15																		
Civil Technologies							21	24	9	10	17	10																		
Drafting & Design Tech.				1			13	13	11	3	11	9																		
Electrical Tech.							5	1	3	8	5	3			1	1														
Electronic Tech.*							34	52	58	51	61	51		1																
Elect.& Electron.Tech.,other							9	4																						
Electromechanical Tech.						3																								
Instrumentation Tech.							16	17	9	28	2	3																		
Chemical Manufact. Tech.	1						14	9	11	9	1																			
Industrial Tech.					10		30	30	20	29	31	25				1														

(CONTINUED NEXT PAGE)

Table 50 (Continued)

Discipline Specialty (Major field of study)	Diploma, Certificate Other Recognition						Associate Degrees						Bachelor's Degrees						Master's Degrees						Doctor's Degrees					
ENGINEERING & RELATED	83	84	85	86	87	88	83	84	85	86	87	88	83	84	85	86	87	88	83	84	85	86	87	88	83	84	85	86	87	88
TECHNOLOGIES (Cont'd)																														
Industrial Prod. Tech.						6	9	19	7	4	7	13																		
Mechanical & Rel.Tech., other							22	16	25	26	13	23				1														
Agriculture Equip.Tech.							2	6					19																	
Engineering Tech., other	6						2	4	4		14	4	2	1				2												
Air Cond./Heat/Refrig.Tech.	3																													
Sanitation Tech.	3																													
Welding Tech.	6	6	9	4	1	4																								
Automotive Tech.		21					1		3	3	4																			
Urban Planning Tech.							2																							
Computer Tech.							10	8	13		19	6																		
Aeronautical Tech.							2				2	1																		
Environmental Control Tech.								1	2	1			3																	
Food Processing Technology			1					1	2	2	1																			
Quality Control/Safety Tech.								1	5																					
Arch. Interior Design									3	6	4																			
Robotics										6		1																		
Dual Programs										1																				
Laser Electro-Optic Tech.				2						5																				

ENGINEERING & RELATED TECHNOLOGIES	1983	1984	1985	1986	1987	1988
Total Awards:	611	594	567	563	524	508

Table 50 (Continued)

Discipline Specialty (Major field of study)	Diploma, Certificate Other Recognition						Associate Degrees						Bachelor's Degrees						Master's Degrees						Doctor's Degrees					
FOREIGN LANGUAGES	83	84	85	86	87	88	83	84	85	86	87	88	83	84	85	86	87	88	83	84	85	86	87	88	83	84	85	86	87	88
Foreign Lang.Multiple Emp.													1	1	3	7	7	5		2	3		4	6						
French													7	7	6	3	6	9			2	2	2							
German													3	3	2		2	5				1	1							
Latin														1																
Russian														2	1	1														
Spanish												1	14	5	7	4	4	3	1	3	4	3								

FOREIGN LANGUAGE	1983	1984	1985	1986	1987	1988
Total Awards:	26	24	28	21	27	29

Table 50 (Continued)

Discipline Specialty (Major field of study)	Diploma, Certificate Other Recognition						Associate Degrees						Bachelor's Degrees						Master's Degrees						Doctor's Degrees					
ALLIED HEALTH	83	84	85	86	87	88	83	84	85	86	87	88	83	84	85	86	87	88	83	84	85	86	87	88	83	84	85	86	87	88
Dental Assisting	3	12	10	13	8	7	4				2																			
Dental Hygiene							11	11	10	12	9	21																		
Radiograph Med. Tech.							3		2	12	5	7																		
Med. Radiation Dosimetry									11																					
Nuclear Med. Tech.							8	7	6	4	6	4																		
Respiratory Therapy Tech.							16	9	8	9	9	6																		
Medical Lab. Tech.							9	6	2	13	16	8																		
Medical Technology								1					9	26	27	28	22	26												
Mental Health/Human Svc.Tech.			1	1	12	6	41	27	43	31	53	75																		
Medical Assisting							5	11	8	5	5	3																		
Medical Records Tech.		4																												
Medical Office Mgmt.	2		5				5		5																					
Practical Nursing	62	64	51	48	43	35																								
Occupational Therapy							1	3			1																			
Physical Therapy												1	35	30	35	28	33	35												
Physical Therapy Asst.	3																													
Clinical Lab. Aide		1																												
Music Therapy								2		1																				
Allied Health, other									1									3												
Health Unit Management						6																								
HEALTH CONTINUED ON NEXT PAGE																														

Table 50 (Continued)

Discipline Specialty (Major field of study)	Diploma, Certificate Other Recognition						Associate Degrees						Bachelor's Degrees						Master's Degrees						Doctor's Degrees					
	83	84	85	86	87	88	83	84	85	86	87	88	83	84	85	86	87	88	83	84	85	86	87	88	83	84	85	86	87	88
HEALTH SCIENCES																														
Medical Laboratory													22																	
Nursing, general							147	137	143	135	129	135	197	172	206	182	189	159	37	32	29	27	27	19						
Anesthetist													4	5	5															
Community Health														1		2	1													
Pre-Vet Science																														
HOME ECONOMICS																														
Home Economics, gen'l													14	22	14	10	11	25												
Family/Consumer Res. Mgmt.													46																	
Food Sci./Human Nutri., gen'l							3						59	5	2	1	4		6	3	5	2	4	5						
Indiv. & Family Deve., gen'l													26	26	18	14	18	20	8	6	2	2	6	3						1
Textiles & Clothing, gen'l															1	2	2		1	1			1							
Fashion Design													22			17	31	26												
Textiles & Clothing, retail								1					52	57	53	69	56	4												
Textile Science													4	4	3	1	1													
Housing/Furnish. & Equip.														29	22															
Consumer Science											1			41	28	58	38	72												
Food/Food Science														6	5	2	6	4												
Dietetics/Human Nutrition														32	34	30	19	41												
VOCATIONAL HOME ECONOMICS																														
Food Service Technology							3																							
Food Sci./Human Nutr., gen'l														1		4		5												
Child Dev., Care, Guidance														1	1															

HEALTH	1983	1984	1985	1986	1987	1988
Total Awards:	551	587	608	551	567	550

HOME ECONOMICS	1983	1984	1985	1986	1987	1988
Total Awards:	244	236	188	212	198	206

Table 50 (Continued)

Discipline Specialty (Major field of study)	Diploma, Certificate Other Recognition						Associate Degrees						Bachelor's Degrees						Master's Degrees						Doctor's Degrees					
	83	84	85	86	87	88	83	84	85	86	87	88	83	84	85	86	87	88	83	84	85	86	87	88	83	84	85	86	87	88
LAW																														
Law																								283	222	238	265	261	245	
Legal Assisting	2	1	4			3	2	4	9	4	4																			
Paralegal		2		1			10	8		7	13																			
Law, Other						3						6																		
																										-				
LETTERS																														
English, gen'l							2	3	2				53	53	42	62	63	66	14	16	20	19	22	20	2	5		2	5	6
Classics														1		1														
English (film)														5	3															
Creative Writing																														
Linguistics													3																2	4
Literature, American																														
Speech, Debate, Forensics																														
Technical & Business Writing													6	20	18	18	35	25												
Letters, other																5	4	5												

LAW	1983	1984	1985	1986	1987	1988
Total Awards:	238	253	265	273	262	295

LETTERS	1983	1984	1985	1986	1987	1988
Total Awards:	81	90	[illegible]	90	131	126

Table 50 (Continued)

Discipline Specialty (Major field of study)	Diploma, Certificate Other Recognition						Associate Degrees						Bachelor's Degrees						Master's Degrees						Doctor's Degrees					
	83	84	85	86	87	88	83	84	85	86	87	88	83	84	85	86	87	88	83	84	85	86	87	88	83	84	85	86	87	88
LIBERAL/GENERAL STUDIES																														
Liberal/General Studies						2	39	19	29	33	38	47	26	14	11	15	8													
LIBRARY & ARCHIVAL SCIENCES																														
Library & Arch.Sci.,gen'l													1																	
LIFE SCIENCES																														
Biology, gen'l							4						93	126	123	112	126	132	4	2	2		2	6	7	3	4	1	7	6
Marine Biology																			16						5					
Entomology													12	6	6	8	8	4	6	2	5	2	5	2						
Biological Technology							10	14	17	17	8	10																		
Ecology/Environ. Sci.								4		1				5																
Plant Psysiology															1															
Environmental Science															4															
Life Sciences, Other																		4												
Plant Pathology																		1												

LIBERAL/GENERAL STUDIES	1983	1984	1985	1986	1987	1988
Total Awards:	65	33	40	48	46	49

LIFE SCIENCES	1983	1984	1985	1986	1987	1988
Total Awards:	157	162	162	141	158	165

LIBRARY & ARCHIVAL SCIENCES	1983	1984	1985	1986	1987	1988
Total Awards:	-	-	-	-	-	-

Table 50 (Continued)

Discipline Specialty (Major field of study)	Diploma, Certificate Other Recognition						Associate Degrees						Bachelor's Degrees						Master's Degrees						Doctor's Degrees					
	83	84	85	86	87	88	83	84	85	86	87	88	83	84	85	86	87	88	83	84	85	86	87	88	83	84	85	86	87	88
MATHEMATICS																														
Mathematics, gen'l								1		2			20	16	34	38	32	30	3	3		3	1	1	3	2		3	5	1
Statistics													1	2	2	1		4	3		4	3	2	2		1	1	2		1
Mathematics, other																	8													
Mathematics/Computer Science														7	7	2		11												
MULTI/INTERDISCIPLINARY STUDIES																														
Early American Culture																			6											
Engineering & Other Discip.							1								1				3											
Professional Arts													31	21	36	10														
Applied Professions													16	25	31	30														
Selected STudies																					9	14	3	10			7	5	3	7
Marine Studies																														
PARKS & RECREATION																														
Parks & Recreation Mgmt.														17	10	11	8	5												
Outdoor Recreation													8	3				1												

MATHEMATICS	1983	1984	1985	1986	1987	1988
Total Awards:	30	32	48	54	48	50

PARKS & RECREATION	1983	1984	1985	1986	1987	1988
Total Awards:	8	3	10	11	8	6

MULTI/DISCIPLINARY	1983	1984	1985	1986	1987	1988
Total Awards:	57	62	87	46	20	-

Table 50 (Continued)

Discipline Specialty (Major field of study)	Diploma, Certificate Other Recognition						Associate Degrees						Bachelor's Degrees						Master's Degrees						Doctor's Degrees					
	83	84	85	86	87	88	83	84	85	86	87	88	83	84	85	86	87	88	83	84	85	86	87	88	83	84	85	86	87	88
PHILOSOPHY & RELIGION													7	3	9	9	6	3	3	2	2	1		1						
Philosophy																														
PHYSICAL SCIENCES								1	3		3	2	7			3	9		5											
Physical Sciences, gen'l							1	1		3			55	73	54	56	66	44	4	12	4	8	7	9	7	19	13	11	9	12
Chemistry, gen'l													36	45	42	31	15	15	5	7	6	13	5	4	1	1	1	1	1	1
Geology													5		8	6	2	2								1		3	1	
Geophysics & Seismology																														
Oceanography																														
Earth Science													11	14	13	13	7	19	5	15	6	3	3	4	2	4	5	5	5	3
Physics, gen'l														2																
Atomic/Molecular Physics																														
Atmospheric Science & Meteorology																														
PSYCHOLOGY							7	2	4	5	9	2	118	137	126	102	145	161	8	17	7	12	7	8	8	8	10	7	6	11
Psychology, gen'l								1					27	21	27	25	22	15												
Psychology, other																														

PHILOSOPHY & RELIGION	1983	1984	1985	1986	1987	1988
Total Awards:	10	5	11	10	6	4

PSYCHOLOGY	1983	1984	1985	1986	1987	1988
Total Awards:	161	186	147	151	189	182

PHYSICAL SCIENCES	1983	1984	1985	1986	1987	1988
Total Awards:	144	195	156	157	133	115

Table 50 (Continued)

Discipline Specialty (Major field of study)	Diploma, Certificate Other Recognition						Associate Degrees						Bachelor's Degrees						Master's Degrees						Doctor's Degrees					
PROTECTIVE SERVICES	83	84	85	86	87	88	83	84	85	86	87	88	83	84	85	86	87	88	83	84	85	86	87	88	83	84	85	86	87	88
Correctional Admin.							2																							
Corrections							10	7	7	15	29																			
Crim. Justice Admin.							13					10	16	17	13	13	18	15												
Crim. Justice Tech.								24	29	26	15	36		1	2	3	1													
Law Enforcement								20	16	24																				
Law Enforcement Admin.							14	2																						
Security Services							2	1																						
Fire Control/Safety Tech.							15	12	14	8		3																		
Protective Svcs., other							1					3																		
Environmental Law								2																						
PUBLIC AFFAIRS																														
Community Services																														
Public Administration																			16	21	17	18	17	23						
Public Sanitation																														
Social Work, gen'l													7	8	9	6	7	9				15	15	16						
Public Affairs, other																			2		3	2								
Marine Policy																							4							
CONSTRUCTION TRADES																														
Precision Production		1																												
Architectural Drafting		1																												
Mechanical Drafting		1			1																									
Construction Trades, other												1																		

PROTECTIVE SERVICES	1983	1984	1985	1986	1987	1988
Total Awards:	73	86	81	89	70	67

CONSTRUCTION TRADES	1983	1984	1985	1986	1987	1988
Total Awards:	-	3	-	-	1	1

PUBLIC AFFAIRS	1983	1984	1985	1986	1987	1988
Total Awards:	25	29	29	41	43	49

Table 50 (Continued)

Discipline Specialty (Major field of study)	Diploma, Certificate Other Recognition						Associate Degrees						Bachelor's Degrees						Master's Degrees						Doctor's Degrees					
	83	84	85	86	87	88	83	84	85	86	87	88	83	84	85	86	87	88	83	84	85	86	87	88	83	84	85	86	87	88
SOCIAL SCIENCES																														
Social Sciences, gen'l							7			3	2	1																		
Anthropology								1	1				11	8	11	9	10	8		1	1		1							
Criminology							2		2	2	1		117	126	91	100	110	110												
Economics							1	2		1	2	1	90	77	84	88	100	90	6	14	16	12	14	17						
Geography									1		2		38	31	21	22	15	14	2	6	4	4	3	2						
History								1		2		1	48	51	49	46	46	43	17	20	8	10	7	14	1	6	3	2	2	3
International Relations							2						34	37	42	45	59	81			1		2	2						
Political Sci./Gov.'t							1			1			82	109	89	73	82	121	6	6	4	5	3	6	2	2	3	1		1
Sociology							1	1		1	1	2	75	62	53	41	44	36	6	8	3	2	3	3		1	1	7	4	
Urban Studies														1	1	1			9	2		7	5	5		6		6	3	2
_____																														
_____																														
MECHANICS & REPAIRERS																														
Heating/Air Con./Ref.Mech.	3	14	2	12	13	13					1																			
Cooling & Refrig.			9	8		12																								
Automotive Mechanics		21	12	20	13	7				4																				
Diesel Engine Mechanics			4	5		13																								
Veh. & Mobile Equip. Repair		9	7	5		7																								
_____																														
_____																														
_____																														
_____																														
_____																														

SOCIAL SCIENCES	1983	1984	1985	1986	1987	1988
Total Awards:	558	581	489	491	521	569

MECHANICS & REPAIRERS	1983	1984	1985	1986	1987	1988
Total Awards:	3	44	34	54	27	52

Table 50 (Continued)

Discipline Specialty (Major field of study)	Diploma, Certificate Other Recognition						Associate Degrees						Bachelor's Degrees						Master's Degrees						Doctor's Degrees					
TRANSPORTATION & MATERIAL MOVING	83	84	85	86	87	88	83	84	85	86	87	88	83	84	85	86	87	88	83	84	85	86	87	88	83	84	85	86	87	88
Truck & Bus Driving	49	49	51	57	62	51																								
Vehicle & Equip.Oper.,other	7																													
Transportation, other																														
Const. Equip. Operator		19	27	3	10	19																								
Aviation Mgmt.								2				1																		
VISUAL & PERFORMING ARTS																														
Graphic Design							1	1					23	22	19	13	17	1												
Dramatic Arts							1						3	10	5	7	9	8												
Fine Arts, Gen'l							1			1	1	1	17	32	23	41	25	34	14	14	6	13	7	11						
Fine Arts, other							2						17				1													
Art History & Appreciation												1	22	16	8	7	9	22	10	6	3	3	8	5	1	2	3	5	4	4
Art Conservation																		2	10	9	10		10	8						
Music, general								3	4	3			7	4	5	4	2	2												
Music Performance								4			2		5	5	1	6	3	8												
Music, Theory & Compos.								3				2	2				1													

TRANSPORTATION & MATERIAL MOVING	1983	1984	1985	1986	1987	1988
	56	70	78	60	72	71

VISUAL & PERFORMING ARTS	1983	1984	1985	1986	1987	1988
	136	131	87	103	102	127